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About This Guide

Welcome to the *Desktop Applications Deployment Reference and Installation Guide*. Desktop Applications are client applications installed on user workstations to facilitate users to perform their role within the enterprise.

Using Desktop Applications:
- Agent screens are captured and saved together with recordings
- Agents can initiate recording
- Supervisors can playback recordings when browsing to the Portal
- Application Administrators can create forms that Supervisors and Managers use to evaluate and assess agents.
- Data is transferred between workstations and data center or site servers.
- Workstation logs are collected for use by technical support.

**Intended Audience**

This guide is designed to be used by:
- Verint Systems and Business Partner professional services staff responsible for planning and setting up systems.
- Customer System Administration and IT staff responsible for site preparation and installing workstations.
- Verint Systems Field Services and partners responsible for installing workstations as part of the installation and site acceptance testing.
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Chapter 1

Getting Started

- Desktop Applications Installation Workflow, page 10
- Desktop Applications Matrix, page 11
- Obtaining the Installation Packages, page 12
Desktop Applications Installation Workflow

The following workflow describes the steps required for installing or upgrading desktop applications on the end user machines:

1 **Plan**: Which desktop applications require installing? See “Desktop Applications Matrix” on page 11.

2 **Prepare**: Ensure the desktops (end user machines) meet the minimum specifications. See Chapter 2 “Customer Requirements”.

3 **Install**: Decide on the Installation Method. Desktop applications can be batch installed silently, or individual applications be manually installed as needed.

   - **Batch Install Desktop Applications by Silent Distribution**: Silent distribution is used to batch install multiple desktop applications. Each batch contains installation scripts based on the desktop user role and privileges. Example scripts are provided for Agents, Supervisors and Managers, Administrators and Analysts, based on the user’s predefined default privileges. See Chapter 3 “Installation by Role: Silent Distribution”.

   - **Install Individual Desktop Applications Manually**: Desktop Applications can be installed manually on individual workstations. For thin client environments, manual installation is the only supported installation method. See Chapter 4 “Installation by Application”

4 **Administer**: System administration of the desktop application is required at times, when configuring site dependent playback or when server name changes need to be reflected in the desktop application configuration registry. See Chapter 6 “System Administration for Desktop Applications”

5 **Upgrade**: If upgrading to desktop applications compatible with systems from previous suite versions, follow the upgrade instructions. See Chapter 5 “Upgrading Desktop Applications”. For upgrading Content Producer, see “Upgrading Content Producer” on page 46.

6 **Refer**: Refer the user to the relevant configuration, administration, or user guide. See Appendix D “Related Documentation”.
## Desktop Applications Matrix

The Desktop Applications Matrix provides a quick reference to the applications and their relevancy for the user. The applications required by each user are based on the default privileges of the predefined roles that are activated with all licensed systems.

<table>
<thead>
<tr>
<th>Desktop Applications</th>
<th>Function</th>
<th>Agents</th>
<th>Supervisors</th>
<th>Managers</th>
<th>Administrators and Analysts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop Resources</td>
<td>Desktop Resources is a prerequisite package that includes mandatory resources required by certain desktop applications. For a complete list of the desktop applications dependent on Desktop Resources, refer to “Software Dependencies between Desktop Applications” on page 25.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Playback</td>
<td>Required to playback audio and screen files from the Portal.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Form Designer</td>
<td>Create and manage evaluation and assessment forms. *A Supervisor or Manager may require Form Designer if they have Administer privileges.</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Standalone Form Designer</td>
<td>Offline version of the Form Designer with modified functionality for customers that need to set up forms in advance of installing Interactions and Analytics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Import Support Package</td>
<td>Imports individual users (not in bulk) from a Windows domain into the User Manager.</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Screen Recording (including AIM)</td>
<td>Trigger audio recording, screen capture and provides logging information.</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pop-up Notification System Client</td>
<td>Send notices to agents manually, or automatically based on performance parameters.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content Producer</td>
<td>Use to develop learning clips. Standalone product for developers of training content.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forecasting and Scheduling</td>
<td>Manage and plan contact center activities.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Planner</td>
<td>Strategic resource planning.</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phonetic Boosting</td>
<td>Enables you to add new terms/phrases to the Speech Recognition engine's pre-defined vocabulary and to boost the recognition of all terms/phrases that are part of your company's vocabulary.</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Real Time Speech Calibration Applications</td>
<td>Analyze and diagnose Real Time Speech Notification performance. Add pronunciations to terms and calibrate notification scoring methods.</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Desktop Gadgets</td>
<td>Displays Scorecard KPI information on the Desktop with near real time updates.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
## Obtaining the Installation Packages

Following the release of the Desktop Installation DVD, up-to-date version of desktop application installation packages are downloaded from the **Verint Online for Customers** site, as follows.

1. **Browse to Impact 360 V11.1 > Support & Downloads > Latest Hotfixes and HFRs.**
2. **Expand the Hotfixes Tree to Impact 360 V11.1 > V11.1 > SPx and filter by Desktop.**
3. **Select the relevant Subsystem, and then click the Download Link (format is KB1XXXX).**
4. **In the Directory window, download the KB11XXXX.zip.**

**IMPORTANT** For DPA clients, use the **DPA Installation DVD**. It contains both DPA server and DPA client installation packages.

### Desktop Applications and Functions

<table>
<thead>
<tr>
<th>Desktop Applications</th>
<th>Function</th>
<th>Agents</th>
<th>Supervisors</th>
<th>Managers</th>
<th>Administrators and Analysts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop and Process Analytics (DPA) Client</td>
<td>Captures desktop activity data according to defined rules and executes DPA triggers such as stop/start recording, message prompts, and guidance scripts.</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPA Process Discovery</td>
<td>Visio based reporting tool for DPA Analysts.</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logger</td>
<td>View log information for troubleshooting purposes. *Agent Logging is also possible using the log component of the Screen Capture Module.</td>
<td>*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Chapter 2

Customer Requirements

- Operating Systems, page 14
- Thin Clients and VMware, page 17
- Hardware Specifications, page 18
- Internet Explorer, page 20
- Third Party Software, page 23
- Software Dependencies, page 25
- Localization, page 26
Operating Systems

- **Windows Operating Systems**, page 14
- **Windows Security Settings**, page 15
- **Windows Firewalls**, page 16
- **Antivirus Settings**, page 16

Windows Operating Systems

The following table lists the supported Operating Systems, for each Desktop Application installed on the end user machine.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Capture Module (including AIM)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Playback</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Form Designer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Standalone Form Designer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>User Import Support Package</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Logger</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pop-up Notification System Client</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Content Producer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Forecasting and Scheduling</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Strategic Planner</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Phonetics Boosting</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Real Time Speech Calibration Application</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Desktop Gadgets</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Desktop and Process Analytics (DPA) Client</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DPA Process Discovery</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Windows Security Settings

- Elevating UAC Security, page 15
- Prerequisites for Windows in a Domain Environment, page 15

All Desktop Applications support SSL and non-SSL communication environments.


Elevating UAC Security

The Desktop Applications installation files must be run as a Windows Administrator. By default, the Windows Vista/7/2008 User Account Control (UAC) security feature is enabled to control Standard User access. As a result, UAC security elevation is required in order to gain the administrative access required for running the installation files.

To elevate UAC security in Windows Vista, Windows 7 and Windows 2008 Operating Systems:

1. Open a Command Prompt, right-click and select Run as administrator.
2. If prompted for the user name and password, provide administrator credentials.
3. When the command prompt opens, run the relevant Desktop Application installation file.
4. Continue the installation according to the procedure relevant to the Desktop application you are installing.

Prerequisites for Windows in a Domain Environment

- When installing the Desktop Applications on Windows Vista/7/2008 in a domain environment, the installation is required to be performed in the same domain or in a trusted domain.
- Since a Workgroup is not a trusted environment, install desktop applications in a Workgroup environment manually.
- In domain environments it is required to support the Kerberos authentication protocol. Refer to the Kerberos Authentication Protocol section in the Technologies, Security, and Networking Deployment Reference Guide.
Windows Firewalls

If any local Windows firewalls or organizational firewalls are enabled on the workstations, it is required to open ports for the Desktop Applications and for browsing to the Portal from the workstations.

**SEE ALSO** The firewall ports that require opening are listed in the *Firewall Ports Configuration* spreadsheet that is delivered together with the *Technologies, Security and Network Integration Deployment Reference Guide*. Ensure the Desktop platform is selected in order to view all Inbound and Outbound ports required.

Antivirus Settings

When real-time antivirus scans are used, there may be file extensions, files and folders that should not be scanned by antivirus applications. To prevent scanning these files, the customer is required to set up the corresponding exclusions in the antivirus application being used.

**SEE ALSO** Refer to the *Technologies, Security and Network Integration Deployment Reference Guide* for the list of antivirus settings required for Desktop Applications.
Thin Clients and VMware

Desktop Applications can run remotely on CITRIX (HDX technology is supported) or Terminal Server thin client, and VMware environments. In thin client environments, manual installation of the Desktop Applications is the only supported installation method.

The hardware specifications for terminal services are proportional to the number of simultaneous users accessing the terminal services. Take into consideration the user profile and the applications they use. See “Hardware Specifications” on page 18 for a list of hardware requirements per user role and per application where relevant.

The following table lists the supported thin client and VMware environments for each of the Desktop Applications:

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

| Playback | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Form Designer | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Standalone Form Designer | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| User Import Support Package | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Logger | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Pop-up Notification System Client | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Content Producer | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Forecasting and Scheduling | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Strategic Planner | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Phonetics Boosting | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Real Time Speech Calibration Application | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

| Desktop Gadget | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |
## Hardware Specifications

The following table lists the hardware requirements for the workstations, per user role and per application where relevant:

<table>
<thead>
<tr>
<th></th>
<th>Agents</th>
<th>Supervisor Manager</th>
<th>Forecasting and Scheduling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk Space</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Desktop and Process Analytics: 10 MB for the client installation files and 100 MB to ensure processes run when there is no network. <strong>For Real Time Speech Calibration Application:</strong> 30 MBs per 100 media files for the temporary storage of media files that are played back during the validation and calibration process.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Processor Speed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Chapter 2 - Customer Requirements

### Hardware Specifications

<table>
<thead>
<tr>
<th></th>
<th>Agents</th>
<th>Supervisor Manager</th>
<th>Forecasting and Scheduling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For Forecasting &amp; Scheduling:</strong> Minimum: 1 Gigahertz (GHz). Recommended: 2 Gigahertz (GHz). For large enterprises with more than 2000 employees (and/or 100 queues) 3 Gigahertz (GHz).</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>For Desktop and Process Analytics:</strong> Minimum: 1 Gigahertz (GHz). Recommended: 2 Gigahertz (GHz)</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Forecasting &amp; Scheduling: Minimum: 1 GB. Recommended: 2 GB. For large enterprises with more than 2000 employees (and/or 100 queues) 4 GB.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>For Desktop and Process Analytics: Minimum: 1 GB. Recommended: 2 GB</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Monitor</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1024 x 768 high color - 16 bit</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>For Forecasting &amp; Scheduling and DPA Process Discovery: Recommended: 1280 x 1024</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>For Speech Analytics: Recommended: 1280 x 1024</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Sound/Video Cards</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound card + speakers and/or headphones</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Peripherals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyboard, Mouse, CD-ROM drive (or access to a shared network drive).</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.100 Mbps 10-BaseT LAN Card</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Internet Explorer

- Internet Explorer Supported Versions, page 20
- Internet Explorer Settings, page 20

Internet Explorer Supported Versions

The following web browsers are supported:

- Internet Explorer 9.0 32-bit
- Internet Explorer 8.0 32-bit
- Internet Explorer 7.0 32-bit

Internet Explorer Settings

The following browser settings are required for workstations installed with Playback or have access the Portal.

1. Open Microsoft Internet Explorer and select Tools>Internet Options.
2. Configure the General tab as follows:
   - In Browsing history>Settings>Temporary Internet Files>Check for newer versions of stored pages:
     - Select Automatically or Every time I visit the webpage (this option causes network overhead).
     - Do not select Every time you start Internet Explorer or Never.
   - In Tabs>Settings>When a pop-up is encountered:
     - Select Always open pop-ups in a new window.
3. Configure the following Security settings for the web content zone:
   - The web content zone is based on network topology. For communication between the Desktop Application and the servers, the following servers and server roles are required to reside in the same web content zone:
     - Application Server (or Load Balancer)
     - Content Server role
     - Framework Reports Server role
   - TIP: Resolve the HTTP/HTTPS aliases from the Enterprise Management server settings or from the Site Preparation Checklist.

Otherwise, the Portal URL can reside in any zone, providing the zone is configured with the following security settings:
a. Select the relevant zone and in **Security level for this zone** click **Custom level**....

The Security Settings dialog box for the zone appears.

b. Scroll down to **ActiveX controls and plug-ins** and set the following:
   - **Binary and script behaviors**: Set as **Enable**.
   - **Download signed ActiveX controls**: Set as **Enable** or **Prompt**.
   - **Run ActiveX controls and plug-ins**: Set as **Enable** or **Prompt**.
   - **Script ActiveX controls marked safe for scripting***: Set as **Enable** or **Prompt**.

c. Scroll down to **Downloads** and set the following:
   - **File download**: Set as **Enable**. If the value selected is **Disable**, the desktop application installation method is limited to manually installing from the media. In addition, call forwarding in the Interactions Portal fails.

d. Scroll down to **Miscellaneous** and set the following:
   - **Access data sources across domains**: Set as **Enable**. If the value selected is **Disable**, Real-Time Monitoring does not function properly.
   - **Allow script-initiated windows without size or position constraints**: Set as **Enable**.
   - For Ad-hoc Reporting, set **Submit non-encrypted form data** to **Enable**.

e. Scroll down to **Scripting** and set the following:
   - **Active scripting**: Set as **Enable** or **Prompt**.
   - **Allow Programmatic clipboard access**: Set as **Enable**.
   - **Scripting of Java applets**: Set as **Enable** or **Prompt**. If the value selected is **Disable**, the Data Analytics Instance Builder may not function properly.

f. Scroll down to **User Authentication** and set the following:
   - For Windows Desktop **Single-Sign On (SSO)**, the web content zone of the servers and server roles communicating with the workstation must be set to **Automatic logon only in Intranet zone** (for local intranet or trusted zones) or **Automatic logon with current username and password** (internet zone).

g. Click **OK** to return to the Internet Settings window.

h. If logging is required, disable Protected Mode (relevant for Windows Vista and later OS; not supported in Windows XP):
   - Below the **Security level for this zone** area, and directly above the **Custom level**... and **Default level** buttons, clear the **Enable Protected Mode** option.
   - Click **OK** on the Internet Options window.
   - If you're prompted with a **Warning!** dialog box, advising that **The current security settings will put your computer at risk**, click the **OK** button.
   - Close Internet Explorer and then open it up again.
4 Configure the **Advanced** tab as follows:
For Application Authentication>Windows Authentication (Active Directory)>Single Sign-On (SSO):

- Scroll to **Security** and select **Enable Integrated Windows Authentication** *(requires restart)*.

For workstations accessing the **Data Analytics** Application:

- For users with rights to access the Data Analytics Instance Builder application, scroll to **Java (SUN)** and select check **Use JRE 1.5/1.6<any update level> for <applet>*. This parameter appears after the Instance Builder application is installed.
- For exporting Data Analytics Instances in SSL environments, scroll to **Security** and clear **Do not save encrypted pages to disk**.

For workstations accessing **Ad-Hoc Reporting**:

- Scroll to **Printing** and select **Print background colors and images**.

For DPA 64-bit Citrix client:

- Scroll to **Browsing** and select **Enable third party browser extensions** *(requires restart)*.
  
  This is required for installing two add-ons for the DPA client. Make sure not to disable these add-ons after installation.

5 Configure the **Privacy** tab as following:

a. In **Settings**, set Select a setting for the Internet zone to **Medium**, **Low**, or **Accept All Cookies**.

b. click **Advanced** and clear **Override automatic cookie handling** and click OK to return to the Privacy tab.

c. In **Pop-up Blocker** click **Settings**. In **Address of Web Site to Allow** enter the Portal address and click **Add**. The address appears in the Allowed Sites box.
Third Party Software

- Third Party Software Required by Desktop Applications, page 23
- Third Party Software Required for Browsing, page 24

Third Party Software Required by Desktop Applications

The following table lists the **minimum 3rd party software requirements** for each Desktop Application installed on the end user machines.

<table>
<thead>
<tr>
<th>Screen Capture Module (including AIM)</th>
<th>Microsoft MChart</th>
<th>Microsoft Windows Installer 3.1 or later</th>
<th>Microsoft Data Access Components (MDAC) 2.8 SP2</th>
<th>Microsoft .NET Framework 2.0 SP1</th>
<th>Microsoft .NET Framework 3.5</th>
<th>Microsoft Visual C++ 2008 Runtime 32-bit**</th>
<th>Microsoft Visual C++ 2008 Runtime 32-bit***</th>
<th>Microsoft Visual C++ 2005 Runtime</th>
<th>Microsoft WSE Runtime 2.0 SP3</th>
<th>Microsoft® DirectX® 9</th>
<th>MSXML 4.0 SP3</th>
<th>Adobe® Flash® Player Plugin version 7 or later</th>
<th>JRE 1.4.2 uses Access Bridge 1.2 or 2.0</th>
<th>Microsoft Message Queue (MSMQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playback</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Form Designer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td>Standalone Form Designer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td>User Import Support Package</td>
<td>✓</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logger</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pop-up Notification System Client</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Content Producer</td>
<td>*</td>
<td>*</td>
<td>✓</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Forecasting and Scheduling</td>
<td>✓</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Strategic Planner</td>
<td>✓</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Phonetics Boosting</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Real Time Speech Calibration Application</td>
<td>✓</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desktop Resources</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Desktop Gadgets</td>
<td>✓</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desktop and Process Analytics (DPA) Client</td>
<td>✓</td>
<td>****</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPA Process Discovery</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

* Required in order to produce Interactions clips.

** When running Windows 64-bit Operating Systems, note that Microsoft Visual C++ 2008 Runtime 32-bit is required.
*** If a customer's third party software requires a specific legacy Java environment, the Java access bridge version for this legacy Java environment must be installed. For details, see http://www.oracle.com/technetwork/java/javase/tech/index-jsp-136191.html.

**** MSMQ is required for the 64-bit Citrix or Terminal Server version of the DPA Client only. The MSMQ Server and MSMQ Server core features are required.

### Third Party Software Required for Browsing

The following lists the prerequisite software required to enable workstation users to browse to the web based applications:

<table>
<thead>
<tr>
<th>Software</th>
<th>Web Based Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Flash Player Plugin</td>
<td>Required for Trend Analysis performed in Speech Analytics applications.</td>
</tr>
<tr>
<td>Java Runtime Environment (JRE)</td>
<td>The following web client applications require JRE:</td>
</tr>
<tr>
<td>Version: JRE 5.0, JRE 6.0, JRE 7.0 are</td>
<td>• Data Analytics Instance Builder</td>
</tr>
<tr>
<td>supported including all minor version</td>
<td>• Storage Manager Rule Editor used by Speech Analytics</td>
</tr>
<tr>
<td>releases.</td>
<td>• Strategic Planner uses JRE version 6 or above</td>
</tr>
<tr>
<td>The recommended versions are JRE 7.0</td>
<td>• WFM packages using Pulse, Adherence, Calendar, Forecasting &amp; Scheduling use JRE</td>
</tr>
<tr>
<td>update 2, JRE 6.0 update 14, and JRE 5.0</td>
<td>version 6 or above</td>
</tr>
<tr>
<td>update 18.</td>
<td>• Ad-Hoc Reporting</td>
</tr>
<tr>
<td>Windows Media Player</td>
<td>• Required to listen to sound prompts and customer recordings in Customer Feedback.</td>
</tr>
<tr>
<td>Version: 9 and higher</td>
<td>• Required to play back files using Windows Media Player from workstations, without</td>
</tr>
<tr>
<td></td>
<td>browsing to the Interactions Home Page.</td>
</tr>
<tr>
<td></td>
<td>• Required for playback controls in the Real Time Speech Calibration Application.</td>
</tr>
</tbody>
</table>
Software Dependencies

- Software Dependencies between Desktop Applications, page 25
- Software for Desktop and Process Analytics (DPA), page 25

Software Dependencies between Desktop Applications

The following table lists the desktop applications, that as a prerequisite, require other desktop applications to be installed.

<table>
<thead>
<tr>
<th>Desktop Applications</th>
<th>Desktop Resources</th>
<th>Multimedia Support Package or Playback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Capture Module (including AIM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playback</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Form Designer</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Standalone Form Designer</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Logger</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Pop-up Notification System Client</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content Producer</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Forecasting and Scheduling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Planner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phonetics Boosting</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Real Time Speech Calibration Application</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Desktop Gadgets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desktop and Process Analytics (DPA) Client</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPA Process Discovery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Required in order to produce Interactions clips.

Software for Desktop and Process Analytics (DPA)

This section lists the third-party software required for DPA triggering and analysis using Process Discovery.

Software for DPA Clients

DPA uses Java Access Bridge when DPA triggers are required on Java based applications and are configured to capture screen controls within of the Java applet.

- Java Access Bridge 1.2 for JRE 1.4 or Lower
- Java Access Bridge 2.0.2 for JRE 1.5 or above
Software for Process Discovery Clients

When not detected on the desktop, these items are installed automatically by the clients.

- **Microsoft Visio:** Version 2007, 2010
- **Microsoft Office Primary Interop Assemblies:** Version 2007

Localization

The Desktop Applications support localized customers. The following table indicates the localization languages supported and if double-byte languages are supported, per Desktop Applications.

Desktop Applications support localization of more than one language simultaneously.

<table>
<thead>
<tr>
<th>Desktop Application</th>
<th>Support for Double-Byte Languages</th>
<th>Supported GUI Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browsing to Web Clients from Workstation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Browsing to the Portal</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Browsing to Customer Feedback application</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Desktop Applications:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen Recording (including AIM)</td>
<td>✓</td>
<td>Localization is not supported</td>
</tr>
<tr>
<td>Pop-up Notification System Client Forecasting and Scheduling Strategic Planner</td>
<td>✓</td>
<td>Chinese (Simplified) French German Japanese Portuguese (Brazilian) Russian Spanish Dutch</td>
</tr>
<tr>
<td>Content Producer</td>
<td>✓</td>
<td>Localization is not supported</td>
</tr>
</tbody>
</table>
CTI Link Agent and Localized Systems

This section is only relevant for systems with Acquisition Recording.

- When **Interactive Agent Login is enabled**, Agents must login in English. This is required when agents do not have unique credentials and CTI Link does not provide agent identification.
- When **Interactive Agent Login is disabled**, localized agent login is supported as agents log in using their Windows credentials.

Set Windows Regional and Language Settings

Windows regional settings must be set in their local language (not English) to provide localized support for Playback and to view Record On-Demand in a language other than English.

Define the format, location and language for non-Unicode programs:

1. From the **Control Panel** select **Regional and Language Options**.
   The Regional and Language Options screen is displayed.

<table>
<thead>
<tr>
<th>Desktop Application</th>
<th>Support for Double-Byte Languages</th>
<th>Supported GUI Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playback</td>
<td>✓</td>
<td>Chinese (Simplified)</td>
</tr>
<tr>
<td>Form Designer</td>
<td></td>
<td>French</td>
</tr>
<tr>
<td>Standalone Form Designer</td>
<td></td>
<td>German</td>
</tr>
<tr>
<td>User Import Support Package Logger</td>
<td></td>
<td>Japanese</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portuguese (Brazilian)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hebrew</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dutch</td>
</tr>
<tr>
<td>Real Time Speech Calibration</td>
<td>✓</td>
<td>Localization is not supported</td>
</tr>
<tr>
<td>Applications</td>
<td></td>
<td>Japanese</td>
</tr>
<tr>
<td>DPA Desktop Prompts</td>
<td>✓</td>
<td>Chinese (Simplified)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Japanese</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portuguese (Brazilian)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dutch</td>
</tr>
<tr>
<td>Desktop Gadgets</td>
<td>✓</td>
<td>Chinese (Simplified)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>French</td>
</tr>
<tr>
<td></td>
<td></td>
<td>German</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Japanese</td>
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<td>Portuguese (Brazilian)</td>
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<td></td>
<td>Russian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spanish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dutch</td>
</tr>
</tbody>
</table>
2 **Define Format:** Format defines the locale to use for the display of the date, time, currency, and measurements:

3 **Define Location:** Location indicates the country or region that you are in.

4 **Define Language for non-Unicode programs** (system locale). This determines the default character set (letters, symbols, and numbers) and font that you use to enter information and that are used to display information in programs that do not use Unicode. This allows non-Unicode programs to run on your computer using the specified language:

5 **Supporting East Asian Languages:**
   - **Windows XP and Server 2003:** Include native support for East Asian languages. To install the files, check the Install files for East Asian languages in the Control Panel > Regional and Language Options > Languages. Note that a minimum of 230 MB of disk space is required and that the Windows CD-ROM is needed.
   - **Windows Vista and 7:** Include support for East Asian characters in the standard installation.

**Set Browser Language Settings**

Dates and calendars are displayed in local format. The system handles dates in Greenwich Mean Time (GMT) in the database, then shows them according to the locale and language for which your system is configured. Language settings should be set to reflect the user interface language.
To change your browser language settings and display dates in local format:

1. Select **Internet Options** from the **Tools** Menu in Internet Explorer.
2. Select the **Languages**... button from the General tab.
3. Set your language preference.
   - If your operating system is Windows XP, you also need to install the corresponding language pack.
4. On the browser of the client machine:
   a. Select **Encoding** from the View menu.
   b. Select **Unicode (UTF-8)**.
Chapter 3

Installation by Role: Silent Distribution

- Silent Distribution Guidelines, page 31
- Silent Distribution for Agents, page 33
- Silent Distribution for Supervisors/Manager, page 35
- Silent Distribution for Administrators and Analysts, page 37
Silent Distribution Guidelines

Silent distribution is used to batch install multiple desktop applications on the end user machines. Each batch contains the installation scripts for the desktop applications required, based on the user role and their associated privileges.

Desktop Applications can be silently installed by distributed to workstations without user or IT staff intervention for automatic installation, usually upon login to the workstation. All standard distribution and packaging methods are supported.

- Before you Begin a Silent Distribution, page 31
- Silent Distribution Workflow, page 32

Before you Begin a Silent Distribution

Before you begin silently distributing the application(s), define a shared folder for the installation scripts, define the installation destinations, and define a group policy.

1 Define a Shared Folder to Save the Installation Files:
The installation scripts are saved here. Ensure the workstations can access this location.
   a. Right-click the defined folder and select the Properties>Sharing tab:
      i. Select Share this folder.
      ii. Click Permissions.
      iii. Grant the Domain Computers group Read rights.
   b. Click the Security tab, and grant the Domain Computers group Read, Read and Execute, and List Folder Contents rights.
   c. Define Organizational Units in the Domain: Segment the workstations according to the predefined user roles. That is, Agent, Supervisor, Manager, Administrator, and Enterprise Administrator.

2 Define the Installation Destination: Define the location on the workstations to install the Desktop Applications.

3 Define a Group Policy: The installation can then be assigned to the relevant group of workstations, and the application(s) are automatically installed next time these workstations are rebooted.
Silent Distribution Workflow

The system supports the distribution of packages over the network from a central location to the workstations using any standard software distribution tool. The distribution tool automatically installs the application(s) without requiring user intervention.

The workflow for distributing the application(s) silently, is as follows:

1. All site preparation and system requirements must be met for each desktop application.
2. Run the distribution script(s) using a standard silent distribution method.
   - If the script contains an installation package of an application already on the workstation, the installation recognizes this and does not reinstall the application.
   - Mandatory parameters must be included and cannot be changed.
   - Silent install parameters are case sensitive and are required to be capitalized.
   - This does not repair faulty installations.
3. On completion:
   - \texttt{EXIT\_CODE = 0} indicates installation success
   - \texttt{EXIT\_CODE = 1} indicates installation failure and the workstation reboots silently.
4. The next time the workstations in the defined organizational unit are restarted, the application(s) are installed.
Silent Distribution for Agents

Agents require Desktop Applications that facilitate audio and screen recording, gadgets (if relevant), and logging for troubleshooting purposes.

- Desktop Applications for Agents, page 33
- Example Script for Agents, page 33

Desktop Applications for Agents

The following Desktop Applications are required for users defined as Agents:

- Desktop Resources (prerequisite for Logger)
- Screen Capture and AIM
- Desktop Gadget
- Logger
- Desktop and Process Analytics (DPA) Client: Installed separately as part of a DPA deployment. The installation instructions are in the Desktop and Process Analytics (DPA) Installation and Configuration Guide.

The predefined Agent role does not have access to the Portal. If agents are granted access, then add Playback to the script.

Example Script for Agents

This script is an example for silently installing the desktop applications for the predefined agent role. Modify the silent parameter default values as required for your specific deployment.

```batch
@echo off
setlocal
REM The script uses parameters for silent reboot when reboot is required
REM Continue running the script after each reboot until each script is installed successfully
REM If installation fails, the EXIT_CODE is 1
set MSIS_DIR=\<Shared network folder:>\Impact360_DesktopApplications
set INSTALLFOLDER=C:\Program Files\<Company Name>
SET EXIT_CODE=0

echo Desktop Resources Installation
msiexec -i "%MSIS_DIR%\DesktopResourcesVerint.msi" USE_COMMAND_LINE=1 TARGETDIR="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 (
SET /A EXIT_CODE=1
echo ---installer failed
) ELSE ( echo ---installer succeeded
)
```
echo Logger Installation
msiexec -i "%MSIS_DIR%\LoggerInstallation.msi" USE_COMMAND_LINE=1 INSTALLFOLDER="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1echo ---installer failed) ELSE (echo ---installer succeeded)
echo Screen Capture Module
msiexec -i "%MSIS_DIR%\Screen_Capture_Module.msi" USE_COMMAND_LINE=1 INSTALLDIR="%INSTALLFOLDER%\Screen Capture Module" AGENT_MONITORING_ENABLED=TRUE /qn
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1echo ---installer failed) ELSE (echo ---installer succeeded)
echo Gadgets
msiexec /i Gadget.msi /qn INSTALLDIR="%INSTALLFOLDER% SERVER_URL=<NLBName>
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1echo ---installer failed) ELSE (echo ---installer succeeded)
echo EXIT_CODE is %EXIT_CODE%
exit /B %EXIT_CODE%
Silent Distribution for Supervisors/Manager

Supervisor Workstations require Desktop Applications that facilitate audio and screen playback, agent monitoring, evaluation and assessment, and workforce optimization. Manager Workstations require Desktop Applications that facilitate access and use of all Portal applications.

- Desktop Applications for Supervisors/Managers, page 35
- Example Script for Supervisor/Manager, page 35

Desktop Applications for Supervisors/Managers

The Desktop Applications required for users defined as Supervisors and Managers are listed here. Links to each application’s silent install parameters is also provided.

- Desktop Resources (prerequisite for Playback and Logger)
- Playback
- Forecasting and Scheduling
- Strategic Planner
- Logger
- Desktop Gadgets

The predefined Supervisor and Manager roles are not recorded by default. For workstations that are required to be recorded, install Screen Capture.

For Supervisors or Managers that are given Administrator privileges and are required to design Forms, include the Form Designer in the example script.

Example Script for Supervisor/Manager

This script is an example for silently installing the desktop applications for the predefined agent role. Modify the silent parameter default values as required for your specific deployment.

```
@echo off
setlocal
REM The script uses parameters for silent reboot when reboot is required
REM Continue running the script after each reboot until each script is installed successfully
REM If installation fails, the EXIT_CODE is 1
set MSIS_DIR=\<Shared network folder:>\Impact360_DesktopApplications
set INSTALLFOLDER=C:\Program Files\<Company Name>
set EXIT_CODE=0

echo Desktop Resources Installation
msiexec -i "%MSIS_DIR%\DesktopResourcesVerint.msi" USE_COMMAND_LINE=1
TARGETDIR="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 ()
SET /A EXIT_CODE=1
```
echo ---installer failed
) ELSE (  
    echo ---installer succeeded
)

echo Logger Installation
msiexec -i "%MSIS_DIR%\LoggerInstallation.msi" USE_COMMAND_LINE=1
INSTALLFOLDER="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 (  
    SET /A EXIT_CODE=1
    echo ---installer failed
) ELSE (  
    echo ---installer succeeded
)

echo Playback Installation
msiexec -i "%MSIS_DIR%\PlaybackInstallation.msi" USE_COMMAND_LINE=1
INSTALLFOLDER="%INSTALLFOLDER%" PLAYBACK_ENCRYPTED=0 ADDLOCAL=Playback NOREBOOT=1 /qn
IF %errorlevel% NEQ 0 (  
    SET /A EXIT_CODE=1
    echo ---installer failed
) ELSE (  
    echo ---installer succeeded
)

echo Gadgets
msiexec /i Gadget.msi /qn /l*vx "c:\gadget.log" INSTALLDIR="%INSTALLFOLDER%" \Remove /l*vx
"c:\gadget.log" SERVER_URL=<NLBName>
IF %errorlevel% NEQ 0 (  
    SET /A EXIT_CODE=1
    echo ---installer failed
) ELSE (  
    echo ---installer succeeded
)

echo Forecasting and Scheduling Installation
msiexec -i "%MSIS_DIR%\ForecastingandScheduling.msi" USE_COMMAND_LINE=1
INSTALLDIR="%INSTALLFOLDER%" SZAPPSERVERNAME=<NLBName> SZAPPSERVERPORT=7001 /qn
IF %errorlevel% NEQ 0 (  
    SET /A EXIT_CODE=1
    echo ---installer failed
) ELSE (  
    echo ---installer succeeded
)

echo Strategic Planner Installation
msiexec -i "%MSIS_DIR%\Setup.exe" USE_COMMAND_LINE=1 INSTALLFOLDER="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 (  
    SET /A EXIT_CODE=1
    echo ---installer failed
) ELSE (  
    echo ---installer succeeded
)

echo EXIT_CODE is %EXIT_CODE%
exit /B %EXIT_CODE%
Silent Distribution for Administrators and Analysts

Administrator Workstations require Desktop Applications that facilitate system application administrative functions, and playback of audio and screen files.

- [Desktop Applications for Administrators and Analysts](#), page 37
- [Example Script for Administrators and Analysts](#), page 37

Desktop Applications for Administrators and Analysts

The Desktop Applications required for users defined as Administrators are listed here.

- Desktop Resources (prerequisite for Playback, Form Designer, Real Time Speech Calibration Application, and Phonetics Boosting)
- Playback
- Form Designer
- User Import Support Package
- Logger
- Real Time Speech Calibration Notification: Used by Analysts with an understanding of the enterprise requirements for Real Time Speech Notifications.
- DPA Process Discovery: Installed separately as part of a DPA deployment. The installation instructions are in the [Desktop and Process Analytics (DPA) Installation and Configuration Guide](#).

Example Script for Administrators and Analysts

This script is an example for silently installing the desktop applications for the predefined agent role. Modify the silent parameter default values as required for your specific deployment. This example script contains the desktop applications listed in “Desktop Applications for Administrators and Analysts” on page 37.

```bash
@echo off
setlocal

REM The script uses parameters for silent reboot when reboot is required
REM Continue running the script after each reboot until each script is installed successfully
REM If installation fails, the EXIT_CODE is 1

set MSIS_DIR=\\<Shared network folder>\Impact360_DesktopApplications
set INSTALLFOLDER=C:\Program Files\<Company Name>
set EXIT_CODE=0
```
echo Desktop Resources Installation
msiexec -i "%MSIS_DIR%\DesktopResourcesVerint.msi" USE_COMMAND_LINE=1
TARGETDIR="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1 echo ---installer failed ) ELSE (echo ---installer succeeded )

echo Logger Installation
msiexec -i "%MSIS_DIR%\LoggerInstallation.msi" USE_COMMAND_LINE=1
INSTALLFOLDER="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1 echo ---installer failed ) ELSE (echo ---installer succeeded )

echo Form Designer Installation
msiexec -i "%MSIS_DIR%\FormDesignerInstallation.msi" USE_COMMAND_LINE=1
VERINTFOLDER="%INSTALLFOLDER%" GLOBAL_APP_SERVER_DNS=NLBName GLOBAL_USE_SSL=0 GLOBAL_APP_SERVER_AUTH_PORT=<80>/qn
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1 echo ---installer failed ) ELSE (echo ---installer succeeded )

echo Playback Installation
msiexec -i "%MSIS_DIR%\PlaybackInstallation.msi" USE_COMMAND_LINE=1
INSTALLFOLDER="%INSTALLFOLDER%" PLAYBACK_ENCRYPTED=0 ADDLOCAL=Playback NOREBOOT=1 /qn
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1 echo ---installer failed ) ELSE (echo ---installer succeeded )

echo User Import Package Installation
msiexec -i "%MSIS_DIR%\UserImportPackageInstallation.msi" USE_COMMAND_LINE=1
VERINTFOLDER="%INSTALLFOLDER%" /qn
IF %errorlevel% NEQ 0 (SET /A EXIT_CODE=1 echo ---installer failed ) ELSE (echo ---installer succeeded )
echo Real Time Speech Calibration Application Installation
msiexec /i Real Time Speech Validation Application.msi /quiet INSTALLROOT="%INSTALLFOLDER%"
GLOBAL_APP_SERVER_DNS="NLBName" GLOBAL_USE_SSL="NO" USE_COMMAND_LINE=1 WFO_PORT=7001

IF %errorlevel% NEQ 0 {
SET /A EXIT_CODE=1
echo ---installer failed
} ELSE {
echo ---installer succeeded
}

echo EXIT_CODE is %EXIT_CODE%
exit /B %EXIT_CODE%
Installation by Application

- **Content Producer**, page 41
- **Desktop Gadget**, page 49
- **Desktop Resources**, page 51
- **Desktop and Process Analytics (DPA) Client**, page 52
- **DPA Process Discovery**, page 52
- **Forecasting and Scheduling Client**, page 53
- **Form Designer**, page 55
- **Form Designer (Standalone)**, page 57
- **Logger**, page 59
- **Phonetics Boosting**, page 61
- **Playback**, page 63
- **Pop-up Notification System**, page 69
- **Real Time Speech Calibration Application**, page 71
- **Screen Capture and AIM**, page 73
- **Strategic Planner Client**, page 84
- **User Import Support Package**, page 86
Content Producer

- Content Producer Overview, page 41
- Manually Installing Content Producer, page 42
- Upgrading Content Producer, page 46

Content Producer Overview

Content Producer is installed and used as a standalone product. Content Producer is comprised of authoring, editing, and conversion tools to develop learning clips. If you use Content Producer with the suite, you can create clips from the recorded segments of customer interactions and then deliver the learning clips via the eLearning Lesson Management system.

Content producer has an authoring component to create/publish clips and an editor component to import/record audio or video contact files (.wav or .avi).

This chapter contains the information required to install Content Producer. For further information refer to the following documents:

- Content Producer User Guide

All site preparation and system requirements must be met before starting the installation. See Chapter 2 “Customer Requirements”.

- Hardware Requirements
  - Intel PIII/AMD K6 550 MHz. For optimal performance, the following is recommended: Intel P4, Intel Centrino, Intel Xeon, or Intel Core Duo (or compatible)
  - 512+ MB RAM (1GB Recommended for optimal performance)
  - 16 Bit+ Video card - 800x600 minimum resolution (1024x768 recommended)
  - 5+ GB Hard Drive with 500+ MB free disk space

- Content Producer installation file: Available from the Portal’s Tools folder.

- License code: Required to activate Content Producer after installation. You will receive the Content Producer license code with your fulfillment package.

- Internet access: For registering Content Producer and upgrading to newer versions.

- Playback: Required in order to produce clips of interactions. See “Playback” on page 63.

NOTE
If you have the Multimedia Support Package (Playback) 9.3 application installed on your system, uninstall the application before starting the Content Producer installation. If you do not uninstall this package, you will be prompted during the Content Producer installation to remove it before continuing with the installation.
Manually Installing Content Producer

Manual installation is the only supported installation method.

1. Double-click the **ContentProducer11.1.0.exe** file.
   - The first window in the Installation Wizard is displayed.

2. Click **Next**.
   - The **License Agreement** screen is displayed.

3. On the **License Agreement** screen, click **I accept the agreement** option, and then click **Next**.
   - The **Select Destination Directory** screen is displayed.

4. If you want to change the default destination, click the **Browse** button, navigate to and then select another directory in which you want to store the program files. Click **Next**.
   - The **Select My Clips Directory** screen is displayed.

5. If you want to change the default destination for clip files generated by Content Producer, navigate to and select another directory. Click **Next**.
   - The **Enter the URL for the Impact 360** screen is displayed.

6. If you want to configure Content Producer to automatically populate lesson information on the eLearning Lesson Details page, type the URL for the system suite. Click **Next**.
   - After Desktop Applications is installed, you can add or modify the system suite URL in Content Producer Author. Click **Edit > Preference > Advanced**.

7. The **Select Start Menu Folder** screen opens.

8. If you want to change the default Start Menu folder in which Content Producer’s shortcuts are saved, select a folder from the list box. Click **Next**.
   - The File Associations screen opens.

9. Click **Next**.
   - The **Select Additional Tasks** screen opens.
9 Click **Next**.

The installation process begins, and its progress is displayed on the **Installing** screen. When the process is complete, click **Finish** to end the installation.

**NOTE** If your system has the Multimedia Support Package 9.3 application installed, a warning message appears during the installation to indicate that you must first uninstall this application before resuming your installation.

Once the installation is complete, shortcuts for Content Producer components appear on your desktop, as follows:

- ✔ Content Producer Author
- ✔ Content Producer Editor

You can also access Content Producer components by clicking **Start > Content Producer**.

10 To activate your license, see “Activating and Registering Your License” on page 44.

**Installing Microsoft DirectX**

If Content Producer detects you do not have Microsoft DirectX installed or your system requires an updated version of DirectX, the **Welcome to setup for DirectX** screen opens:

**NOTE** If, during the course of the installation, Content Producer detects that you do not have Microsoft DirectX installed, you are prompted to install the Microsoft DirectX. For details, see “Installing Microsoft DirectX” on page 43.

To install Microsoft DirectX

1 Click the **I accept the agreement** button to confirm you accept the terms of the licensing agreement, and then click **Next**.

The **Installing Microsoft DirectX** screen opens, indicating that components are downloading, and showing the time left for the process to complete. It may take several minutes.

2 When the process is complete, click **Next** to open the **Restart Computer** screen.

3 When you are ready to restart your computer, click **Finish**.
Activating and Registering Your License

Once you install Content Producer, you need to activate and register your license.

<table>
<thead>
<tr>
<th>If you are activating and registering your license on a desktop...</th>
<th>See...</th>
</tr>
</thead>
<tbody>
<tr>
<td>With an Internet connection</td>
<td>“Activating and Registering a License on a Desktop with an Internet Connection” on page 44.</td>
</tr>
<tr>
<td>Without an Internet connection</td>
<td>“Activating and Registering a License on a Desktop without an Internet Connection” on page 45.</td>
</tr>
</tbody>
</table>

**NOTE** If you are accessing the Internet using a proxy server, you need to set proxy server preferences first, so that you can activate your license, receive updates, and access Content Producer Help and support site. For details, see Step 5 in the procedure “Setting Preferences in Content Producer” on page 45.

Activating and Registering a License on a Desktop with an Internet Connection

1. Click **Start > Content Producer > Content Producer Author**. The Content Producer main window opens.
2. In the left pane, select **License Activation**. The **License Activation** dialog box opens.
3. In the **License Code** box, type the license code that you received, and then click **Next**. If you entered the code correctly, the **Registration** dialog box opens.
4. Type the appropriate details in the dialog box, and then click **Next**. A progress screen appears, and if the activation is successful, the screen refreshes with the **Successful** dialog box.
5. Click **Finish** to complete the process and close the dialog box. In the Content Producer main window, in the **Help** area, **Licensed** appears under the **License Deactivation** item. You are now ready to use Content Producer.

**NOTE** If the license activation process is not successful, though you entered the correct license key, contact your support consultant.

6. To configure Content Producer by setting preferences, see “Setting Preferences in Content Producer” on page 45.
Activating and Registering a License on a Desktop without an Internet Connection

1. Follow steps 1 to 4 in the procedure "Activating and Registering a License on a Desktop with an Internet Connection" on page 44.

   Because your desktop does not have an Internet connection, the **Connection Problem** window is displayed.

2. Click the **Web Activation** link.

   The **Web Activation** window is displayed.

3. From the **Step 1: Open the Web Activation Web** page box, copy the URL address.

   **NOTE** Because you do not have an Internet connection, copy the URL address to a text file, and save the file to a disk. Insert the disk and open the file on a desktop that has an Internet connection, and from the text file, copy the URL address again.

4. At a desktop that has an Internet connection, open a web browser, and paste the URL into the browser’s address box. Click **ENTER**.

   The online **Web Activation** screen opens.

5. Click **Submit**.

   The **Web Activation** screen refreshes, showing the confirmation code in the **Confirmation Code** box.

6. Copy the confirmation code, using the same method you used in step 3 (for example, by copying it to a text file and saving it to disk), and then close the page.

7. Return to the desktop without an Internet connection for which you are activating and registering the license. In the **Web Activation dialog** box, paste the confirmation code from step 6 into the **Step 3: Enter the supplied Confirmation Code** text box.

8. Click **Next**.

   The confirmation code is verified, and your license is activated. You can begin using Content Producer.

9. To configure Content Producer by setting preferences, see “Setting Preferences in Content Producer” on page 45.

Setting Preferences in Content Producer

1. Launch Content Producer by clicking the Content Producer Author icon on your desktop, or by clicking **Start > Content Producer > Content Producer Author**.

2. On the menu bar of the Content Producer main window, click **Edit > Preferences**.

   The **Preferences** dialog box opens.

3. To set recording countdown timing preferences, click the **General** tab. Make the changes you want in the **Recording** areas of the tab.
4 To choose a dictionary and spelling preferences (such as whether or not to check for upper and lowercase words), click the **Spelling** tab. Make changes as required.

5 If you access the Internet with a proxy server, you must set proxy server preferences so that you can activate your license, receive Content Producer updates, and access the Help files and the support site. Click the **Proxy** tab and do the following:
   - Check the **Use a proxy server** box
   - Enter the proxy server’s IP address and port number in the **Address** and **Port** boxes.

**NOTE** Ensure that you type the proxy servers’ IP address, not a URL address, in the **Address** box.

   - If the server requires login authentication, check the **User proxy authentication** box, and type the login name and password in the **Login** and **Password** boxes.

6 To create log files that record issues that arise while you are using Content Producer, click the **Logging** tab, and do the following:
   - In the **Output Window** area, select a logging option from the **Report** dropdown list box.

<table>
<thead>
<tr>
<th>For...</th>
<th>Select...</th>
</tr>
</thead>
<tbody>
<tr>
<td>normal day-to-day application use</td>
<td><strong>Display Errors Only</strong> This option only logs application error events.</td>
</tr>
<tr>
<td>troubleshooting issues</td>
<td><strong>Display All Information</strong> This option logs all application event types including information events for successful operations. It impacts application performance.</td>
</tr>
</tbody>
</table>

   - In the **Log File** area, select the options for outputting log records to a file.

7 To enable backup file options, click the **Backup** tab.

8 To change Java virtual machine settings, click the **Advanced** tab.

9 Click **OK** to save your preferences and close the dialog box.

### Upgrading Content Producer

Once you have installed Content Producer, you find out about and upgrade to new releases. This section contains the following information:

   - **Checking For and Upgrading to the Most Recent Content Producer Release**, page 47
   - **Upgrading From Pre-7.8.x Versions of Content Producer**, page 48
Checking For and Upgrading to the Most Recent Content Producer Release

You can check for the latest Content Producer release from the Content Producer Author Welcome window.

Note that if your company’s firewall prevents automatic registration or updates, you must first configure the appropriate proxy information, as described in step Step 5 in the procedure “Setting Preferences in Content Producer” on page 45.

To successfully upgrade to the most recent Content Producer release, see “Checking for and Upgrading to the Most Recent Content Producer Release” on page 47.

Checking for and Upgrading to the Most Recent Content Producer Release

1. Launch Content Producer to open the Welcome to Producer window.

2. In the Actions area, click Check for Updates.

   The Check for Updates dialog opens.

3. Choose one of these options:
   - Select the Content Producer automatically check for updates option, and from the drop-down list box, select the time interval within which you want the
system to check for updates: **Daily, Weekly, or Monthly.** The default is **Weekly.**

- Select the **Manually check for updates** option. Choosing this option prohibits the system from automatically checking for updates.

4 To immediately check for updates, click **Check Now** then click **OK.**

5 You either get a message with information about updates, or a message that your version of Producer is up-to-date.

**NOTE**

During an upgrade, the **My Documents\My Clip Assets Library** folder is renamed, such that a number which includes the date of the upgrade is attached to the folder name (for example, the new name of the old folder might be: **My Clip Assets_Library_11.1.3010_20110802**).

If you created your own HTML frame template in the previous version of Content Producer, you can retrieve your template from this folder. Because the HTML frames are changed in the new release, the best practice is to customize your HTML frames using the latest version’s templates.

### Upgrading From Pre-7.8.x Versions of Content Producer

1 Click **Start > Settings > Control Panel > Add or Remove Programs.**

2 In the **Add or Remove Programs** window, locate the pre-7.8.x version of Producer that you want to remove, and select it.

3 Click **Remove.**

Once the uninstall process ends, the pre-7.8.x version of Producer is removed from your system.

4 Install the new release of Content Producer, as described in the procedure “All site preparation and system requirements must be met before starting the installation. See Chapter 2 “Customer Requirements”.” on page 41.
Desktop Gadget

- Desktop Gadget Overview, page 49
- Manually Installing Desktop Gadget, page 49
- Desktop Gadget Silent Install Parameters, page 50

Desktop Gadget Overview

The Desktop Gadget provides employees with their KPI information on their desktop where they can easily glance at it throughout their shift. Providing this important information on their desktop makes it easy for employees to be aware of their performance and gives them the opportunity to make adjustments when necessary to meet their goals.

The information provided on the KPI Gadget varies based on the licenses your company has purchased and how the gadget is configured (that is, the selected options and the KPI periodicity).

The KPI Gadget feature is especially useful with Intraday KPIs. It shows near real-time data to employees as they work. However, if your organization does not have the licenses required for Intraday KPIs, you can still create KPI Gadgets for the other periodicities (such as Daily, Weekly).

This chapter contains the information required to install the gadget. For further information regarding configuration and usage of the gadget, refer to the following documents:

- Scorecards Administration Guide
- Scorecards User Guide

All site preparation and system requirements must be met before starting the installation. See Chapter 2 “Customer Requirements”.

Manually Installing Desktop Gadget

The Desktop Gadget manual installation procedure must be performed on the desktop on which the application will be run.

To install the Desktop Gadget:

1. Double-click the **Gadget.msi** to launch the Installation Wizard.
2. Click **Next** and read the End-User License Agreement.
3. Select **I accept the terms in the license agreement** and click **Next**.
4. In the **Destination Folder** window, click Next to install to the default folder, or click **Change** to install to a different folder.
5. In the **Server URL** window enter the **name of the server** associated with the Framework Application Server Role or Load Balancer. If not configured during installation, the user is asked to enter the address when first opening the application.
6 In the **Ready to Install** the Program window, click **Install** to begin the installation.

7 The **Installing Desktop Gadget** window appears displaying the installation status.

8 When the installation is complete, the **InstallShield Wizard Completed** window appears. Click Finish. Click **Finish**. The Desktop Gadget icon appears on the desktop.

In addition the gadget can be initiated from the start menu or from...**Program Files\<Company Name>\Desktop Gadgets**. Following initialization a tray icon is used to control the gadget and change the configuration settings.

## Desktop Gadget Silent Install Parameters

The Desktop Gadget is installed on Agent desktops. Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

The following properties determine how the Desktop Gadget is configured silently on the agent desktops.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>Gadget.msi</td>
</tr>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE=1</td>
</tr>
<tr>
<td></td>
<td><strong>Mandatory</strong></td>
</tr>
<tr>
<td>&lt;log file path&gt;</td>
<td>The path to the gadget log files</td>
</tr>
<tr>
<td></td>
<td>Default is C:\gadget.log</td>
</tr>
<tr>
<td>INSTALLDIR</td>
<td>Specifies the installation destination</td>
</tr>
<tr>
<td></td>
<td>Default is C:\Program Files&lt;Company Name&gt;\Gadget</td>
</tr>
<tr>
<td>SERVER_URL</td>
<td>Name of the Application Server or Load Balancer.</td>
</tr>
<tr>
<td></td>
<td><strong>Default=Empty</strong></td>
</tr>
</tbody>
</table>
Desktop Resources

- Desktop Resources Overview, page 51
- Manually Installing Desktop Resources, page 51
- Desktop Resources Silent Install Parameters, page 51

Desktop Resources Overview

Desktop Resources is a pre-requisite package that includes mandatory resources required by certain desktop applications.

For a complete list of the desktop applications dependent on Desktop Resources, refer to “Software Dependencies” on page 25.

For all software and hardware specifications refer to Chapter 2 "Customer Requirements”.

Manually Installing Desktop Resources

The Desktop Resources manual installation procedure must be performed on the desktop on which the dependent desktop applications will be run.

To install Desktop Resources:

1. Double-click the DekstopResources.msi to launch the Setup Wizard.

2. If a security warning appears, click Run.
   
   The installer asks you to wait while it configures the Desktop Resources, and closes automatically.
   
   - Desktop Resources is now listed in Add/Remove Programs
   - The Registry now contains the brand related keys here: HKEY_LOCAL_MACHINE>SOFTWARE>IMPACT360>INSTALL

Desktop Resources Silent Install Parameters

The following properties determine how Desktop Resources is installed silently on the desktops. Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIS_DIR</td>
<td>&lt;Shared network folder:&gt;\Impact360_DesktopApplications</td>
</tr>
<tr>
<td>MsFiIe</td>
<td>DesktopResourcesVerint.msi</td>
</tr>
</tbody>
</table>
Desktop and Process Analytics (DPA) Client

The DPA client for agents captures desktop activity data according to defined rules and executes DPA triggers such as stop/start recording, message prompts, and guidance scripts.

Installed separately as part of a DPA deployment, the DPA client installation instructions are documented in the Desktop and Process Analytics (DPA) Installation and Configuration Guide.

DPA Process Discovery

Visio based reporting tool for DPA Analysts. Process Discovery provides a means to discover workflow variations between users and to visualize these workflows as Microsoft Visio diagrams.

Installed separately as part of a DPA deployment, the DPA Process Discovery installation instructions are documented in the Desktop and Process Analytics (DPA) Installation and Configuration Guide.
Forecasting and Scheduling Client

- Forecasting and Scheduling Installation Overview, page 53
- Manually Installing Forecasting and Scheduling, page 53
- Forecasting and Scheduling Silent Install Parameters, page 54

Forecasting and Scheduling Installation Overview

Forecasting and Scheduling provides a Supervisor or Manager with an intuitive desktop solution for managing and planning contact center activities including:

- Flexible forecasting and scheduling based on your contact center rules and needs.
- Virtual contact center management.
- Seamless integration with your automated call distributor (ACD).
- Queue- and group-level performance analysis and monitoring with easy-to-read graphs.
- Robust employee management tools.

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

Manually Installing Forecasting and Scheduling

- Installing Forecasting and Scheduling, page 53
- Installing Forecasting and Scheduling on Windows Vista, page 54

Installing Forecasting and Scheduling

1 Run the ForecastingandScheduling.msi file.
2 In the Welcome screen, click Next.
3 In the License Agreement screen, select I accept the terms in the license agreement and click Next.
4 In the Destination Folder screen, click Next to accept the default location, or click Change to define a different location and then click Next.
5 In the Configuration screen, type the Application Server name or Load Balancer name, and Port that Forecasting and Scheduling connects to, and then click Next.

**NOTE** The Port number is always HTTP port number 7001, including for SSL systems.

6 In the Ready to Install screen, click Install.

When the installation is complete, the Installation Success window appears.
7 Click **Finish** to exit the installation wizard.
   The **Installer Information** message appears prompting you to restart the computer.

8 Restart your computer.

### Installing Forecasting and Scheduling on Windows Vista

Due to how Windows Vista registers system DLLs and/or OCXs, the following steps must be taken to install Forecasting & Scheduling on Windows Vista.

1 Install Forecasting & Scheduling on Windows Vista using the `<DVDROOT>\SuiteCd4_ForecastingAndScheduling\ForecastingAndScheduling` path.

2 Open an Administrative DOS console and run `SetupForVista.cmd`.
   When the installation window opens, follow Step 2 to Step 8 of the procedure described at “Installing Forecasting and Scheduling” on page 53.

### Forecasting and Scheduling Silent Install Parameters

The following properties determine how Forecasting and Scheduling is configured silently. Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>ForecastingAndScheduling.msi</td>
</tr>
<tr>
<td>SZAPPSERVERNAME</td>
<td>The name of the server hosting the Framework Applications server role (the Application Server or Load Balancer). Mandatory.</td>
</tr>
<tr>
<td>SZAPP SERVER PORT</td>
<td>The port number of the Framework Applications server role (hosted on the Application Server or Load Balancer). Default = 7001</td>
</tr>
<tr>
<td>INSTALLDIR</td>
<td>Specifies the installation destination.Default = C:\Program Files&lt;company name&gt;\Forecasting and Scheduling</td>
</tr>
</tbody>
</table>
Form Designer

- Form Designer Overview, page 55
- Manually Installing Form Designer, page 55
- Form Designer Silent Install Parameters, page 56

Form Designer Overview

The Form Designer is used for designing evaluation and assessment forms.
This chapter contains the information required to install the Form Designer. For further information using Form Designer, refer to the following documents:

- Quality Monitoring Form Designer User Guide

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

Manually Installing Form Designer

This application requires the mandatory resources contained in Desktop Resources. Ensure “Desktop Resources” on page 51 is installed on the desktop before proceeding.

1 Run the FormDesignerInstallation.msi file.

The Welcome screen of the setup wizard appears.

2 Click Next.

The End-User License Agreement screen appears.

3 Select I accept the terms in the License Agreement and click Next.

The Custom Setup screen appears.

To view the required space for an application, select it in the list and read the text in the pane on the right.

4 Click Next.

5 If a list of missing prerequisites appears, click Close and then click Cancel. Install the missing prerequisites and restart the installation.

When there are no missing prerequisites, the General Settings screen appears.

6 Enter the address of the Application Server or Load Balancer. If required, resolve the address as follows:

a. Access the Portal and Select the System Management tab.

b. Select Enterprise Management > Enterprise Settings.

c. Select the Server Settings tab of the Server associated with the Framework Applications Server Role.

d. Expand Additional Settings to find the HTTP/HTTP Alias.
Chapter 4 - Installation by Application Form Designer

7 Enter the **Port Number of the Framework Applications server role**. Refer to the *Firewall Ports Configuration* spreadsheet for details on the default port for SSL and non-SSL systems.

8 (Optional) Select **Use SSL for client/server communication**.

9 Click **Next**.
   The **Ready to Install** window appears.

10 Click **Install**.
   When the installation is complete, the **Installation Success** window appears.

11 Click **Finish** to exit the installation wizard.
   The **Installer Information** message appears prompting you to restart the computer.

12 Restart your computer.

### Form Designer Silent Install Parameters

The following properties determine how Form Designer is silently configured. See Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>FormDesignerInstallation.msi</td>
</tr>
<tr>
<td>VERINTFOLDER</td>
<td>Specifies the installation destination</td>
</tr>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE=1 Mandatory</td>
</tr>
<tr>
<td>GLOBAL_APP_SERVER_DNS</td>
<td>Name of the Application Server or Load Balancer. Mandatory</td>
</tr>
<tr>
<td>GLOBAL_APP_SERVER_AUTH_PORT</td>
<td>The port number of the Framework Applications server role (authentication URL port, by default = 7001, or 7002 if SSL is configured). Mandatory</td>
</tr>
<tr>
<td>GLOBAL_USE_SSL</td>
<td>0 = Do not use SSL. 1 = Use SSL. Default = 1</td>
</tr>
<tr>
<td>TERMINAL_SERVER</td>
<td>0 = No Terminal server. 1 = Terminal server mode. Default = Auto detect.</td>
</tr>
</tbody>
</table>
Form Designer (Standalone)

This chapter provides instructions for installing the Form Designer as a Standalone application prior to installing the system. This is for customers that need to build forms prior to the system deployment.

This chapter includes:

- **Form Designer (Standalone) Overview**, page 57
- **Manually Installing the Form Designer (Standalone)**, page 57
- **Uninstalling the Standalone Form Designer**, page 58

Form Designer (Standalone) Overview

This Installation Guide provides instructions for installing the Form Designer as a Standalone application prior to installing the system.

Some of the functions described in the Form Designer online help and user guide are not available because this is a standalone application. The following functions are not available in the Standalone Form Designer:

- Shared components are not available.
- Shared data is not available. This includes Evaluations Custom Data (including auto population from any external source), Status 1 and Status 2, Rating, Reasons and Default Form.
- In the Form List window, the following menu buttons are disabled in the Form List toolbar: Open Form, Delete Form, Change Status, Export Form, Export to Excel, Rename, Refresh.
- You can only work with one form at a time: Therefore, the form list is not displayed in the main window.
- Forms are not saved in the database: They can only be saved as XML files.
- Versioning is not available when you save forms.
- Localization updates are limited. All changes made with the Caption Editor tool and all language updates installed on the server are unavailable. The Standalone Form Designer is delivered with its own language resource files (at the time of publishing, the available languages are English (US and UK), Canadian French, and Spanish).
- Changing captions of Yes/No questions and Five Rank Lists is not available.

Manually Installing the Form Designer (Standalone)

This application requires the mandatory resources contained in Desktop Resources. Ensure "Desktop Resources" on page 51 is installed on the desktop before proceeding.

1. Ensure all site preparation and system requirements are met for this application.
2. To start the installation wizard:
   - Double-click the **FormDesignerStandAloneInstallation.msi** icon.
For Windows Vista: When the following message appears: An unidentified program wants access to your computer, click Allow to continue.

The Welcome screen of the Form Designer Standalone Setup wizard is displayed.

3 In the Welcome screen, click Next.

The End User License Agreement is displayed.

4 In the End User License Agreement screen, select I accept the terms in the License Agreement, and click Next.

The Destination Folder screen appears.

5 Select a destination folder for the Form Designer and click Next.

The recommended folder is C:\Program Files\<Company Name>\.

6 Click Next to confirm the destination.

The Ready to install screen appears.

7 Click Install to begin the installation.

The installation starts. The status is displayed as the installation proceeds. The Completed Setup Wizard screen appears at the end of the setup.

8 Click Finish to exit the Setup Wizard.

9 To run the Form Designer, do one of the following:
   - On the desktop, double-click the Form Designer Standalone icon.
   - From the Start menu, go to Programs > <Company Name> and select Form Designer Standalone.

The Standalone Form Designer opens.

Uninstalling the Standalone Form Designer

1 From Start > Settings > Control Panel, open Add or Remove Programs.

2 Select the Form Designer Standalone option.

3 Click Remove.

The Form Designer is uninstalled.
Logger

- **Logger Overview**, page 59
- **Manually Installing Logger**, page 59
- **Logger Silent Install Parameters**, page 60

### Logger Overview

Installing the Logger provides the infrastructure for the Desktop Applications to generate logs. Log severity and destination defaults can be modified for troubleshooting purposes by using the Logger Manager. Logs can be viewed using the Logger Viewer.

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

### Manually Installing Logger

The manual installation procedure must be performed on the desktop on which the application will be run.

This application requires the mandatory resources contained in Desktop Resources. Ensure "Desktop Resources” on page 51 is installed on the desktop before proceeding.

To install Logger:

1. Download the installation package, according to “Downloading the Installation Packages” on page 24.
2. Run the **LoggerInstallation.msi** file.
   - The **Welcome** screen of the setup wizard appears.
3. Click **Next**.
   - The **End-User License Agreement** screen appears.
4. Select **I accept the terms in the License Agreement** and click **Next**.
   - The **Custom Setup** screen appears.
   - To view the required space for an application, select it in the list and read the text in the pane on the right.
5. Click **Next**.
6. If a list of missing prerequisites appears, click **Close** and then click **Cancel**. Install the missing prerequisites and restart the installation.
   - When there are no missing prerequisites, the **Ready to Install** window appears.
7. Click **Install**.
   - When the installation is complete, the **Installation Success** window appears.
8. Click **Finish** to exit the installation wizard.
The **Installer Information** message appears prompting you to restart the computer.

9 Restart your computer.

**Logger Silent Install Parameters**

Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

The following properties determine how Logger is configured silently on the agent desktops.

<table>
<thead>
<tr>
<th>Basic Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>LoggerInstallation.msi</td>
</tr>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE=1</td>
</tr>
<tr>
<td>INSTALLFOLDER</td>
<td>Specifies the installation destination</td>
</tr>
</tbody>
</table>
Phonetics Boosting

- Phonetics Boosting Overview, page 61
- Manually Installing Phonetics Boosting, page 61

Phonetics Boosting Overview

Phonetics Boosting enables you to add new terms and phrases to the Speech Recognition engine’s pre-defined vocabulary. It enables you to boost the recognition of all terms and phrases that are part of your company’s vocabulary. Once a term is boosted, it will be better recognized and therefore be more effective in searches, categories and trends.

This chapter contains the information required to install Phonetics Boosting. For further information refer to the following documents:

- Phonetics Boosting User Guide

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”. The desktop must have at least 500 MB of free RAM space.

Manually Installing Phonetics Boosting

The Phonetics Boosting installation procedure must be performed on the desktop on which the Phonetics Boosting application will be run.

This application requires the mandatory resources contained in Desktop Resources. Ensure “Desktop Resources” on page 51 is installed on the desktop before proceeding.

To install Phonetics Boosting:

1. Double-click the Phonetic Boosting Application Installer.msi to launch the following Phonetics Boosting Application Setup Wizard:

2. Click Next.
   The window that appears includes the Phonetics Boosting End-User License Agreement.

3. Read the End-User License Agreement.

4. Select I accept the terms in the License Agreement and click Next.
   The Custom Setup window appears.

5. Click Next.
   The Ready to install Phonetics Boosting Application window appears.

6. Click Install.
   The Installing Phonetics Boosting Application window appears.
7 Click **Next**, once the Setup Wizard completes the Phonetics Boosting installation. The **Completed the Phonetics Boosting Application Setup Wizard** window appears.

8 Click **Finish**. Phonetics Boosting has been installed successfully.
Playback

- Playback Overview, page 63
- Manually Installing Playback, page 63
- Silent Install Parameters for Playback, page 65
- Playback without Portal, page 66
- Enabling Real Time Playback of Encrypted Screen Content in Transit, page 67
- Configuring Playback Stereo Recorded Contacts as Mono, page 67

Playback Overview

The Playback application is required on the workstations of users privileged to access audio and screen files from the Portal applications. Playback enables users to hear audio and see recorded screen activity, change the volume or speed of a call, jump to different points in a call, and see the waveform for an interaction.

The Multimedia Support Package incorporates codecs and infrastructure for the Playback controls. The package is installed automatically when installing Playback.

For all software and hardware specifications refer to Chapter 2 "Customer Requirements".

Manually Installing Playback

Ensure all site preparation and system requirements are met before proceeding with the following installation instructions. This application requires the mandatory resources contained in Desktop Resources. Ensure “Desktop Resources” on page 51 is installed before proceeding.

1. Download the installation package, according to "Downloading the Installation Packages" on page 24.

2. Run the PlaybackInstallation.msi file. The Welcome to the Playback Setup Wizard screen appears.

3. Click Next. The End-User License Agreement screen appears.
4 Select **I accept the terms in the License Agreement** and click **Next**. The **Custom Setup** screen appears.

5 Select the relevant features to install:

- **To Install Playback** keep the default feature settings as they appear in the above image. It is not required to make the Multimedia Support Package available for installation as the Playback application incorporates this package and installs it automatically.

- **To Install the MultiMedia Support Package only:**
  Relevant when downloading audio files for playback on machines outside the enterprise or on machines that do not have access to the Portal player.
  - Expand **Playback** and select **Entire feature will be unavailable**.
  - Expand **MultiMedia Support Package** and select **Will be installed on local hard drive**.

6 Select additional options as required:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Browse</strong></td>
<td>Use to change the default destination folder. The Browse button is enabled when <strong>Desktop Applications</strong> is selected.</td>
</tr>
<tr>
<td><strong>Reset</strong></td>
<td>Click the Reset button to revert to the default installation settings.</td>
</tr>
<tr>
<td><strong>Disk Usage</strong></td>
<td>Click the Disk Usage button to view the disk space required compared to the disk space on the destination drives.</td>
</tr>
</tbody>
</table>

7 Click **Next**. The installer indicates if prerequisite software is missing. If required, stop the installation, install the prerequisite software and resume the installation. The **Playback Settings** screen appears.
8 If your system’s audio and screen files are not encrypted click Next.
If your system’s audio and screen files are encrypted, select Encrypted Playback and in the Data Center Address field, set the address of the server on which Data Center resides.
If your system’s audio and screen files are encrypted, select Encrypted Playback and in the Data Access Services Address field, set the following address:
http: or https://<name of Application Server or Load Balancer>/KeyProxy/ManagementService.asmx

9 Click Next. The Ready to Install window appears.

10 Click Install. When the installation is complete, the Installation Success window appears.

11 Click Finish to exit the installation wizard. The Installer Information message appears prompting you to restart the computer.

12 Restart your computer.

NOTE Playback is supported in thin-client environments. However, due to delay in playback of audio between the CITRIX or Terminal Server and its client, the audio quality could be reduced. To overcome this, reduce the buffering of audio on the client side. However, it is important to understand that there could still be some reduction in the quality of playback.

Silent Install Parameters for Playback

Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

The following properties determine how Playback is configured silently on the agent desktops.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>PlaybackInstallation.msi</td>
</tr>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE=1</td>
</tr>
<tr>
<td></td>
<td>Mandatory</td>
</tr>
<tr>
<td>INSTALLFOLDER</td>
<td>Specifies the installation destination</td>
</tr>
<tr>
<td>PLAYBACK_ENCRYPTED</td>
<td>0 = Disable encrypted playback</td>
</tr>
<tr>
<td></td>
<td>1 = Enable encrypted playback</td>
</tr>
<tr>
<td></td>
<td>Default = 0</td>
</tr>
<tr>
<td>PLAYBACK_ENCRYPTIONSERVICE</td>
<td>The address of the server on which Data Center resides.</td>
</tr>
<tr>
<td></td>
<td>Default=Empty</td>
</tr>
</tbody>
</table>
Playback without Portal

When playback of audio files recorded by the system is required by users that do not have access to the Portal, including users outside the enterprise, the following methods can be used to playback the audio files:

- **Download in Standard Windows format:** An enterprise user downloads audio files from the Portal in the standard Windows codec format and sends them to the external user. This method is supported from Windows XP Operating Systems and higher.

- **Download in proprietary compressed format and supply the user with the relevant codec (Multimedia Support Package):** An enterprise user downloads audio files from the Portal in the proprietary codec format, sends them to the external user, and supplies the external user with the Playback.msi for installing the Multimedia Support Package.

- **Download in Proprietary Format and convert to standard Windows format:** An enterprise user downloads audio files from the Portal in the proprietary codec format, converts them to a standard Windows codec file using the Media Encoder, and then sends the converted audio files to external user.

**TIP**  Decrypted files only should be sent outside the enterprise, as playback of encrypted files require login to the Portal.

**SEE ALSO** For detailed information on the Media Encoder, see Appendix B “Media Encoder”.

### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDLOCAL</td>
<td>Playback</td>
</tr>
<tr>
<td></td>
<td>MultimediaSupportPackage</td>
</tr>
<tr>
<td></td>
<td><strong>Default = Playback</strong></td>
</tr>
<tr>
<td>NOREBOOT</td>
<td>0 = Reboot</td>
</tr>
<tr>
<td></td>
<td>1 = No reboot</td>
</tr>
<tr>
<td></td>
<td><strong>Default = 0</strong></td>
</tr>
</tbody>
</table>
Enabling Real Time Playback of Encrypted Screen Content in Transit

To enable real time playback of encrypted screen content in transit from the supervisor desktop, obtain the client.wss file and save it in the supervisor desktop in the installation folder (default: C:\Program Files\<Company Name>). For details about obtaining the client.wss file, see the Security Configuration Guide.

Configuring Playback Stereo Recorded Contacts as Mono

You can configure the system to playback of stereo recorded contacts as mono recorded contacts. The configuration is done by adding a new key to the registry.

Enabling Stereo Playback as Mono

1. Open **Notepad**.
2. Depending on the operation system, copy one of the following content into Notepad:
   - For 32-bit operating system:
     
     Windows Registry Editor Version 5.00

     \[HKEY_LOCAL_MACHINE\SOFTWARE\Verint\Samurai\]
     "MonoToStereo"=dword:00000001

   - For 64-bit operating system:
     
     Windows Registry Editor Version 5.00

     \[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Verint\Samurai\]
     "MonoToStereo"=dword:00000001
3. Save the file as *.reg (this file must be saved in *.reg file format).
4. Locate the file you created in step 4, and double-click it. A confirmation message appears.
5. Click **Yes**.
Disabling Stereo Playback as Mono

Disabling the stereo playback as mono functionality can be done by either updating the value of the MonoToStereo key in the registry or by deleting the key entirely.

To update the key:

1. Open Notepad.
2. Depending on the operation system, copy one of the following content into Notepad:
   - For 32-bit operating system:
     
     Windows Registry Editor Version 5.00
     
     [HKEY_LOCAL_MACHINE\SOFTWARE\Verint\Samurai]
     "MonoToStereo"=dword:00000000
   - For 64-bit operating system:
     
     Windows Registry Editor Version 5.00
     
     [HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Verint\Samurai]
     "MonoToStereo"=dword:00000000
3. Save the file as *.reg (this file must be saved in *.reg file format).
4. Locate the file you created in step 3, and double-click it. A confirmation message appears.
5. Click Yes.

To delete the key:

1. Go to Start>Run and type Regedit.
2. Depending on the operation system, locate one of the following registries:
   - For 32-bit operating system:
     
     [HKEY_LOCAL_MACHINE\SOFTWARE\Verint\Samurai]
   - For 64-bit operating system:
     
     [HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Verint\Samurai]
3. Right-click the MonoToStereo key and select Delete.
Pop-up Notification System

- **Pop-up Notification System Overview**, page 69
- **Installing Pop-up Notification System Manually**, page 69
- **Pop-Up Notification Silent Install Parameters**, page 70

### Pop-up Notification System Overview

The Pop-up Notification System, by default, is not privileged by any predefined user roles. When licensed, it is recommended to install the client on all workstations at the site.

The Pop-up Notification System client allows a WFO administrator, manager, supervisor, or scheduler to send pop-up messages to employees by selecting the recipients' name, login or role within the organization. Alternatively, administrators can configure automatic messaging based on conditions such as out of range KPIs or adherence issues. Three message templates are available to reflect high or normal priority, or confidentiality.

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

### Installing Pop-up Notification System Manually

The installation procedure must be performed on the desktop on which the application will be run.

To install Pop-up Notification System:

1. From the media, run the **PopupClient.msi** file.
   The **Welcome** screen of the setup wizard appears.
2. Click **Next**.
   The **License Agreement** screen appears.
3. Select **I accept the terms in the license agreement** and click **Next**.
   The **Destination Folder** screen appears.
4. Click **Next** to accept the default location, or click **Change** to define a different location, and then click **Next**.
   The **Server Configuration** screen appears.
5. In the **Domain Name** field, type the Domain name of the DNS that resolves the Pop-Up server. For example, **qa.bluepumpkin.local**.
6. (Optional) To configure the SSO Multiple domain mode, select **Do you wish to configure SSO Multiple Domain mode?** and then click **Next**.
   The **Ready to Install** window appears.
7. Click **Install**.
When the installation is complete, the **Installation Success** window appears.

8. Click **Finish** to exit the installation wizard.

The **Installer Information** message appears prompting you to restart the computer.

9. Restart your computer.

**NOTE**

If the pop-up client cannot be installed on port 2701, contact your business consultant regarding changing the Pop-up client command line options in order to change the port.

### Pop-Up Notification Silent Install Parameters

The following properties determine how Pop-Up Notification is configured silently. Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>PopupClient.msi</td>
</tr>
<tr>
<td>WS_SERVER</td>
<td>Domain name of the DNS that resolves the Pop-Up server. <strong>Mandatory.</strong></td>
</tr>
<tr>
<td>INSTALLDIR</td>
<td>Specifies the installation destination</td>
</tr>
<tr>
<td></td>
<td>Default = C:&lt;Company Name&gt;\Pop-up Client</td>
</tr>
<tr>
<td>WS_MULTIDOMAIN</td>
<td>Specifies whether to configure the SSO Multiple domain mode.</td>
</tr>
<tr>
<td></td>
<td><strong>Mandatory.</strong></td>
</tr>
<tr>
<td></td>
<td>Valid values: Yes, No</td>
</tr>
</tbody>
</table>
Real Time Speech Calibration Application

- Calibration Application Overview, page 71
- Manually Installing Real Time Speech Calibration Application, page 71
- Calibration Application Silent Install Parameters, page 72

Calibration Application Overview

The calibration application is used to enhance the accuracy with which keywords defined in Real Time Speech Notification rules are identified. The rules must be configured to trigger a calibration action in order for the recording to be marked as one to be examined with the calibration application.

The Analyst user examines the system’s current accuracy in detecting keywords, can add new term pronunciations, and calibrates the system with an updated scoring method for term detection success.

This chapter contains the information required to install the application. For further information on using the application, refer to the following documents:

- Real Time Speech Calibration Application User Guide

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

Manually Installing Real Time Speech Calibration Application

The manual installation procedure must be performed on the desktop on which the application will be run.

This application requires the mandatory resources contained in Desktop Resources. Ensure “Desktop Resources” on page 51 is installed on the desktop before proceeding.

To install Real Time Speech Calibration Application:

1. Run the Real Time Speech Validation Application.msi file.
   - The Welcome to the Real Time Speech Validation Application Setup Wizard screen appears.

   **TIP**
   - The installer recognizes when the Multimedia Support Package is not installed the installation is terminated.

2. Click Next.
   - The License Agreement screen appears.

3. Select I accept the terms in the license agreement and click Next.
   - The Destination Folder screen appears.

4. Configure the following parameters:
• **Install Real Time Speech Validation Application to:** The default value is C:\Program Files\Impact360\....

• **Name of the Application Server or Load Balancer.**

• **SSL Only:** Select for systems configured to use SSL for client/server communication.

• **WFO Port:** Enter the port of the Framework Applications server role. Ensure the port is for SSL or non-SSL communication, whichever is relevant. The ports are listed in the *Firewall Ports Configuration Guide*.

5 Click **Next** and then **Install**.

When the installation is complete, the **Installation Completed** window appears.

6 Click **Finish** to exit the installation wizard.

A shortcut to the application appears on the desktop and can be accessed from the Start Menu in the Impact360 folder.

### Calibration Application Silent Install Parameters

The following properties determine how the Real Time Speech Calibration Application is configured silently. Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>Real Time Speech Validation Application.msi</td>
</tr>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE=1 Mandatory</td>
</tr>
<tr>
<td>INSTALLROOT</td>
<td>Specifies the installation destination Optional Default = C:\Program Files&lt;Company Name&gt;\</td>
</tr>
<tr>
<td>GLOBAL_APP_SERVER_DNS</td>
<td>Name of server hosting the Framework Applications Server role or Load Balancer Mandatory</td>
</tr>
<tr>
<td>GLOBAL_USE_SSL</td>
<td>Yes = SSL systems No = non-SSL systems Default = No</td>
</tr>
<tr>
<td>WFO_PORT</td>
<td>The SSL or non-SSL port number of the Framework Applications server role (hosted on the Application Server or Load Balancer) Mandatory</td>
</tr>
</tbody>
</table>
Screen Capture and AIM

- Screen Capture and AIM Overview, page 73
- Manually Installing Screen Capture and AIM, page 73
- Screen Capture and AIM Silent Install Parameters, page 78

Screen Capture and AIM Overview

Screen Capture and AIM includes three main components:

**Capture Service:** Manages the starting and stopping of the Screen Capture Program. Communicates with the Recorder to track agent login and logoff events both on an agent’s desktop PC or a Terminal Session and notifies the Integration Service of these events.

**Screen Capture Program:** On request from the Recorder, this component captures screen changes from a desktop PC or Terminal Session and forwards the changes to the Recorder where they are saved into a file.

**Agent Initiated Monitoring (AIM):** Enables the agent to control the recording process by issuing Start/Stop/Pause/Resume/Block Monitor Parameters. Installation of AIM is optional.

This chapter contains the information required to install Screen Capture and AIM. For further information on using AIM, refer to the following documents:

- AIM Quick Reference Guide
- AIM Online Help

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

Manually Installing Screen Capture and AIM

You can use the instructions in this section to perform a manual installation on an agent workstation, a Terminal Server, a Citrix server, or a Virtual Machine. The installation screens that appear when installing on a Terminal Server or Citrix server are slightly different than those that appear when installing on an agent workstation. The differences are noted in the following procedure.

To install Screen Capture and AIM:

1. Run as administrator the *Screen_Capture_Module.msi* file.
   The **Welcome** screen of the setup wizard appears.

2. Click **Next**.

3. One of two screens appears depending on whether you are installing the Screen Capture Module on a Terminal Server/Citrix server or on an agent workstation PC:
• **Destination Folder** - If this screen appears, skip to Step 5. This screen appears after the Welcome screen when you are installing the Screen Capture Module on an agent workstation PC.

• **Terminal Services configuration** - If this screen appears, continue to Step 4. This screen appears when you are installing the Screen Capture Module on a Terminal Server or Citrix Server.

4 The **Terminal Services configuration** screen settings are needed only if you use Quality Monitoring v7.8 (SP1 or 2) or v7.7 servers in your environment. Configure this screen as follows:

- If all of the servers in your environment are v11 (or v7.8) Recorder servers, delete any existing entries in the field provided for the BDR Server Name and Port Number. Then click Next and proceed to step 5.

- If you use Quality Monitoring v7.8 or 7.7 servers in your environment:
  
  i. In the field provided for the BDR Server Name and Port Number for the Terminal Services Adapter, type the host name of your BDR server and the port number on which the Terminal Services Adapter listens for connections. Separate the host name and port with a colon. For example, BDRServer1:3022.

  ii. Separate multiple entries with a comma. For example, BDRServer1:3022,BDRServer2:3022

  iii. Select **Named Terminal Services Terminal** if your thin-client terminals are assigned host names.

  iv. Select **Anonymous Terminal Services Terminal** if you identify thin client sessions using the Windows username of the user.

  Then click Next to proceed to step 5.

5 In the **Destination Folder** screen, accept the defaults or click Change to select different destination folders for the Screen Capture software and its log files. Then click Next.

6 (Optional) In the **Data Security** screen, select **Data Encryption** to:

- Authenticate the connection from the Screen Capture Module to the Screen Recorder. If the authentication fails, the connection is terminated.

- Encrypt the recorded screen content while it is on the agent workstation before sending it to the network. This applies to screen capture communication with the recorder, and screen real time streaming to the supervisor desktop.

Then click Next.

7 In the **Integration Services Options** screen do one of the following:

- If you are installing the Screen Capture Module to work with Quality Monitoring Servers v7.8 (SP1 or 2) or v7.7, you do not need to configure this screen. Clear the **Connect to Integration Services** option, and click Next to continue to step 8.

- If you are installing the Screen Capture Module on a Terminal Services/Citrix Server, or on a PC configured in Enterprise Manager as a dynamic workstation, to operate with V11 (or v7.8) Recorder servers, do the following:
i. Select **Connect to Integration Services**.

ii. Type the host name and port of the server that hosts the Integration Service server role used by the v11 (or v7.8) Recorder server in the **Connect Adapter URL** `<hostname:port>` field, and then click **Next**.

   For example: ISserver1:29522. Separate multiple entries with a comma. For example, ISserver1:29522,ISserver2:29522.

**IMPORTANT** Refer to the *Firewall Ports Configuration* spreadsheet.

Port 29522 is the default port in v11. In an upgrade scenario when the Integration Service is still at version 7.8 level, use port 3081. Once the Integration Service is upgraded to version 11 change the port to 29522.

- If you are installing the Screen Capture Module on Terminal Server or Citrix server, and you use Unify Servers to support CTI integration with v11 or v7.8 Recorder servers, do the following:
  
  i. Select **Connect to Unify Servers**.

  ii. Type the host name and port of the server that hosts the Unify Service server role used by the v11 or v7.8 Recorder servers in the **Connect Adapter URL** `<hostname:port>` field and then click **Next**.

     For example: UnifyServer1:3090. Separate multiple entries with a comma. For example, UnifyServer1:3090,UnifyServer2:3090.

8 In the **Agent Initiated Monitoring** screen, you have the option to install the Agent Initiated Monitoring options. Do one of the following:

- Install one or more of the Agent Initiated Monitoring options:
  
  - Select **Install Agent Initiated Monitoring** to enable an agent to initiate and stop the recording of a call from the agent’s desktop.
  
  - Select **Enable Block Monitoring** to allow an agent to block the monitoring of call and screen capture sessions that the agent initiates.
  
  - Select **Enable Pause and Resume Monitoring** to allow an agent to pause the recording of both voice and screen activity and then resume recording at a later point in the call.

     This feature is useful for preventing the recording of sensitive information while keeping a record of the call itself.

  
  - Then click **Next**.

  - If you do not want to install the Agent Initiated Monitoring options, clear the checkmarks from all three options on this screen, and click **Next**. Skip to Step 12.

9 The **Quality Monitoring AIM Options** screen settings are needed only if the Screen Capture Module must operate with Quality Monitoring V7.8 (SP1 or2) or V7.7 servers in your environment. Configure this screen as follows:

- If all of the servers in your environment are V11 (or V7.8) Recorder servers, clear the **Connect to Quality Monitoring Server** option, and click **Next**. Proceed to Step 11.
• If you use Quality Monitoring v7.8 or 7.7 servers in your environment, do the following:
  i. Select **Connect to Quality Monitoring Server**.
  ii. In the **Quality Monitoring Connect Adapter URL <hostname:port>** field, type the hostname and port for the BDR server (the server on which the Quality Monitoring Connect Adapter resides). For example, BDRServer1:3020.
  iii. Select **Use CTI with AIM** to log on to AIM through CTI. With this option, the agent does not have to complete a separate login to use AIM.
  iv. Select **Use Manual Login** to prompt the agent to enter a user name and password before allowing the agent to use AIM. (If you do not select this option, skip Step 10 and proceed to Step 11 after completing this step.)
  v. Select **Enable anonymous terminal login with screen only workspaces** to allow anonymous terminal login to a workspace without a telephone (available only if you are installing the Screen Capture Module on a Terminal Server or a Citrix server).
  vi. Click **Next**.

10 If you select **Use Manual Login** in the previous step, the **Quality Monitoring Manual Logon Configuration** screen appears. This screen enables you to determine what entries (if any) appear by default to the user in the Agent ID and Agent Extension fields of the AIM login screen.

Configure the agent’s manual login credentials as follows:
• In the **Agent ID** field, type a value for the Agent ID field on the AIM login screen. If you leave this field blank, the agent must manually type the Agent ID in the AIM login screen (the field is not automatically populated).
• In the **Lock ID?** option, select **Yes** to prevent the agent changing the Agent ID that appears in the AIM login screen. Select **No** to allow the agent to change the Agent ID that appears in the AIM login screen.
• In the **Agent Extension** field, type a value for the Agent Extension field on the AIM login screen. If you leave this field blank, the agent must manually type the Agent Extension in the AIM login screen (the field is not automatically populated).
• In the **Lock Extension?** option, select **Yes** to prevent the agent changing the Agent Extension that appears in the AIM login screen. Select **No** to allow the agent to change the Agent Extension in the AIM login screen.

Then click **Next**.

11 In the **AIM Annotation Setup** screen, do one of the following:
• If you do not want to enable annotation for AIM, clear the checkmark from the **Enable annotation for Agent Initiated Monitors** option and click **Next**. Skip to Step 12.
• Select **Enable annotation for Agent Initiated Monitors** to enable annotation for AIM, and configure settings as follows:
  • In each required **User Field**, type a value.
    Values must exactly match what is configured for the Custom Attributes in the Quality Monitoring (V7.8 or 7.7 QM Servers) System Administration tool or Enterprise Manager (V11 or 7.8 Recorder servers). You do not have to enter a value in all five User Field boxes.
  • Select **Define User Tips** to configure a tooltip for each annotation field.
    The user tip text is entirely at your discretion. This text should explain to the agent the specific reason each User Field is available for annotation.
  • Select **Clear Annotation Field Values** to determine the behavior of the Annotate Call dialog box in the AIM program.
    Agents can use the Annotate Call dialog box to enter different annotations for each call. If you select this option, all of the fields on the Annotate Call dialog box are empty each time an agent opens the Annotate Call dialog box.
    If you clear this option, the Annotate Call dialog box preserves the settings from the previous time it was used. When an agent opens the Annotate Call dialog box, the dialog box contains the same values that the agent entered the last time the agent used the Annotate Call dialog. This option is useful if agents frequently enter the same annotation information for many different calls.
• Click **Next**.

12 Click **Install**.

### Configuring Screen Capture and AIM in a Citrix Environment

Perform the instructions in this section if you have installed the Screen Capture Module in a Citrix environment to operate with either Quality Monitoring (QM) or V11 Recorders in a Citrix environment.

**NOTE**
If you have a Citrix XP environment that does not use Terminal Services, skip the instructions in this section.

Use the following procedure to identify the published applications used by agents in a terminal services environment on Citrix. You must identify Published Applications to prevent the Screen Capture Module from ending prematurely.

1 Launch the Microsoft Registry Editor.
2 Navigate to the following key:
   
   HKLM\SOFTWARE\Witness Systems\eQualityAgent\Capture\CurrentVersion\AdditionalUserApps

3 Add a string value (REG_SZ) to the key for each published application. Ensure that you observe the following restrictions:
   • Value Name: Use any name that you want.
• Value Data: The value must match the name of the published application executable. Do not include the executable’s path. For example, “MyApplication.exe”.

Screen Capture and AIM Post Installation Notes

When installing the Screen Capture Module to work with a Recorder server, the Recorder server must be configured to support screen recording. As part of this configuration, the administrator uses the Enterprise Manager application to create workstation groups. When configuring the workstation groups, the administrator can configure three settings that control the quality of screen recording:

• Recording Quality/Data Rate
• Reduced Color
• Screen Change Detection Interval

Once these settings are configured in Enterprise Manager, the Recorder server sends them to the Screen Capture Module, and these settings control the quality of screen recording. If these settings are not configured in Enterprise Manager, the registry settings of the Screen Capture Module control the quality of screen recording.

SEE ALSO

• For more information on creating and configuring workstation groups, see the Recorder Configuration and Administration Guide.
• For more information on the Screen Capture registry settings, limitations and known issues, see Appendix A “Working with the Screen Capture Module”.

Screen Capture and AIM Silent Install Parameters

The following mandatory and configurable parameters are for silently installing Screen Capture and AIM:

• Screen Capture Basic Install Parameters, page 78
• AIM Silent Install Parameters, page 80
• Terminal Services Server Silent Install Parameters, page 83

Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

Screen Capture Basic Install Parameters

The following properties determine how Screen Capture is configured silently on the agent desktops.
<table>
<thead>
<tr>
<th><strong>Basic Parameters</strong></th>
<th><strong>Description and Default Values</strong></th>
</tr>
</thead>
</table>
| INSTALLDIR          | Specifies the installation destination  
**Default** = `<Program Files>\<Company Name>\Screen Capture Module` |
| ENCRYPTION_DATAENCRYPT | Determines whether or not data encryption is selected. 
**Default** = NULL (FALSE).  
**NOTE:** If selected, make sure that Data Encryption is enabled in the System Administration Root Settings.  
TRUE = data encryption is selected.  
FALSE = data encryption is not selected. |
| ENCRYPTION_WSSPATH | Specifies the path for the agent.wss file. Must be a valid Windows path. 
**Default** = same path as INSTALLDIR |
| AGENT_MONITORING_ENABLED | Determines whether or not to install AIM. 
**Default** = NULL (FALSE).  
**NOTE:** If selected, make sure that AIM is enabled in the System Administration Root Settings.  
TRUE = Install AIM.  
FALSE = Do not install AIM. |
| COLOR_REDUCTION | Determines the ColorReduction value. 
**Default** = 1 for new installations.  
For upgrades installations of Screen Capture retain the existing ColorReduction value. Can be changed by System Administrators in registry at HKEY_LOCAL_MACHINE \ SOFTWARE \ Witness Systems \ eQuality Agent \ Capture \CurrentVersion |
| CONN_INTG_SVC | Determines if there is a connection to an integration service. 
**Default** = NULL (FALSE)  
**NOTE:** If selected, make sure that Integration Services is enabled in the System Administration Root Settings.  
TRUE = connect to Integration Services is selected. Required in agent free-seating environments  
FALSE = connect to Integration Services is not selected. |
| INTG_SERVERS | Relevant in agent free-seating environments.  
When CONN_INTG_SVC = FALSE, set parameter to an empty string.  
When CONN_INTG_SVC = TRUE, enter string of comma delimited `<server name>:`<port number> pairs. |
| WDLS | Enable/disables SDK logging |
## AIM Silent Install Parameters

The following properties determine how AIM, Manual AIM, AIM Annotation are configured silently on the agent desktops.

Use these parameters when you have enabled AIM installation using the `AGENT_MONITORING_ENABLED = TRUE` command.

<table>
<thead>
<tr>
<th>AIM Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTI_BUTTON_GRP</td>
<td>Indicates whether the site uses CTI for recording.</td>
</tr>
<tr>
<td></td>
<td>CTI = Use CTI for recording.</td>
</tr>
<tr>
<td></td>
<td>MANUAL = Do not use CTI for recording.</td>
</tr>
<tr>
<td></td>
<td><strong>Default</strong> = CTI</td>
</tr>
<tr>
<td>CONNECT_ADPTR_URL</td>
<td>The server name and port number on which the Quality Monitoring Connect Adapter listens for requests.</td>
</tr>
<tr>
<td></td>
<td>Syntax: <code>CONNECT_ADPTR_URL=&quot;&lt;servername&gt;:&lt;port&gt;&quot;</code></td>
</tr>
<tr>
<td></td>
<td><strong>NOTE:</strong> Use with Quality Monitoring 6.x and above.</td>
</tr>
<tr>
<td></td>
<td>Required.</td>
</tr>
<tr>
<td></td>
<td>Port range: 0 - 65535.</td>
</tr>
<tr>
<td></td>
<td><strong>Default</strong> = Witness:3020.</td>
</tr>
<tr>
<td>MONITOR_BLOCK</td>
<td>Determines if agents have the ability to block capture sessions they initiate.</td>
</tr>
<tr>
<td></td>
<td>TRUE = agents enabled to block monitoring they initiate.</td>
</tr>
<tr>
<td></td>
<td>FALSE = agents not able to block monitoring they initiate.</td>
</tr>
<tr>
<td></td>
<td><strong>Default</strong> = NULL (FALSE).</td>
</tr>
<tr>
<td>ENABLE_ANNOT</td>
<td>Determines if agents have the ability to annotate captured sessions.</td>
</tr>
<tr>
<td></td>
<td>TRUE = agents can annotate sessions they initiate.</td>
</tr>
<tr>
<td></td>
<td>FALSE = agents cannot annotate sessions they initiate.</td>
</tr>
<tr>
<td></td>
<td><strong>Default</strong> = NULL (FALSE).</td>
</tr>
</tbody>
</table>
### AIM Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUSEMONITORING</td>
<td>The silent install inserts the DWORD value 'HKLM\SOFTWARE\Witness Systems\AIM\PauseMonitoring' into the Registry. Determines if agents have the ability to pause and resume monitoring a call for security and confidential card information reasons. 1 = agents can pause and resume contact recording 0 = agents cannot pause and resume contact recording, and cannot view the Pause Monitoring and Resume Monitoring AIM menu options. Any valid Windows path. <strong>Default:</strong> &lt;Program Files&gt;\Witness Systems\Screen Capture Module\Logs</td>
</tr>
<tr>
<td>AGENT_LOGS</td>
<td>Specifies the drive and path used by AIM to store and write log files.  Any valid Windows path. <strong>Default:</strong> &lt;Program Files&gt;\Witness Systems\Screen Capture Module\Logs</td>
</tr>
</tbody>
</table>

### Manual AIM Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGENT_EXTENSION</td>
<td>Use to automatically populate agent extension when they log on to AIM. Number. <strong>Default:</strong> 1234</td>
</tr>
<tr>
<td>AGENT_EXTENSION_LOCK</td>
<td>Determines if agents can change their extensions when logging on to AIM. 1 = agents cannot change extensions when logging on. 0 = agents can change extensions when logging on. If you do not want to lock extensions, exclude this parameter. <strong>Default:</strong> 0.</td>
</tr>
</tbody>
</table>
### Manual AIM Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description and Default Values</th>
</tr>
</thead>
</table>
| AGENT_ID        | Use to automatically populate agent ID when an agent logs on to AIM.  
Number  
**Default**: 1234. |
| AGENT_ID_LOCK   | Determines if agents can change their Agent IDs when logging on to AIM.  
1 = agents cannot change IDs when logging on.  
0 = agents can change IDs when logging on.  
If you do not want to lock extensions, exclude this property from the command line.  
**Default**: 0. |

### AIM Annotation Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description and Default Values</th>
</tr>
</thead>
</table>
| ANNOT_USER      | Determines the user fields available for annotation. These fields must also be configured in the database, and configured in Quality Monitoring.  
Syntax: ANNOT_USER<n> = “UserField<n>”  
(where <n> is an integer from 1 to 5)  
String  
**Default**: UserFieldn.  
You do not have to provide values for all five fields. |
| USERTIP         | Determines the user tips available for annotation.  
Syntax: USERTIP<n> = “<value n>”  
(where n is an integer from 1 to 5)  
String  
**Default**: This is User Field n.  
You do not have to provide values for all five fields. |
Terminal Services Server Silent Install Parameters

The parameters in this table are applicable only for deployments with a Quality Monitoring package.

<table>
<thead>
<tr>
<th>Screen Capture and AIM Parameters for Terminal Services Servers</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIM_TERMINAL_SERVICES</td>
<td>Determines whether anonymous terminal logon with screen only workspaces should be enabled.</td>
</tr>
<tr>
<td></td>
<td>1 = TRUE</td>
</tr>
<tr>
<td></td>
<td>0 = FALSE</td>
</tr>
<tr>
<td></td>
<td>Any value other than 1, including nothing (NULL), equals 0 (FALSE).</td>
</tr>
<tr>
<td></td>
<td>Only available for Quality Monitoring 6.x and above.</td>
</tr>
<tr>
<td></td>
<td>Default: 0 (FALSE).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WS_TERMINAL_SERVER_LIST</th>
<th>BDR Server Name and Port Number for the Terminal Services Adapter in the format: <a href="">ServerName:Port</a>.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Only available for Quality Monitoring 6.x.</td>
</tr>
<tr>
<td></td>
<td>Default: Witness:3022</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WS_TERM_SERVER_AGENTID</th>
<th>Choose from either the Named Terminal Services Terminal or the Anonymous Terminal Services Terminal.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 (Named Terminal Services Terminal -Thin client terminals have hostnames assigned to them)</td>
</tr>
<tr>
<td></td>
<td>1 (Anonymous Terminal Services Terminal - Thin client sessions is identified using the Windows username of the user)</td>
</tr>
<tr>
<td></td>
<td>Default: 0 (Named Terminal Services Terminal)</td>
</tr>
</tbody>
</table>
Strategic Planner Client

- **Strategic Planner Overview**, page 84
- **Manually Installing Strategic Planner**, page 84
- **Strategic Planner Silent Install Parameters**, page 85

### Strategic Planner Overview

Strategic Planner is a desktop resource for strategic resource planning that you can install in an MSSQL environment. Strategic Planner allows you to plan long term for multi-skilled contact center and enterprise back-office environments, assess the operational and financial benefits, and impacts of different scenarios before making decisions, increase forecasting accuracy with sophisticated analysis of historical data, plan your resources to reflect projected customer demand and corporate objectives, develop optimal staffing plans that minimize costs while meeting service goals, and provide executives with the information they need to review and rapidly approve budgets and plans.

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

### Manually Installing Strategic Planner

1. From the media, run the `Setup.exe` file.
   The **Welcome** screen of the setup wizard appears.

2. Click **Next**.
   The **License Agreement** screen appears.

3. Click **Yes** to accept the terms in the license agreement.
   The **Choose Destination Location** screen appears.

4. Click **Next** to accept the default location, or click **Browse** to define a different location and then click **Next**.
   When the installation is complete, the **Installation Success** window appears.

5. Click **Finish** to exit the installation wizard.
   The **Installer Information** message appears prompting you to restart the computer.

6. Restart your computer.

### Configuring the Strategic Planner License Key

1. Open the Strategic Planner for the first time.
   A pop-up window opens requesting company and license information.

2. Type the information about the company name and the license key.
Strategic Planner Silent Install Parameters

The following properties determine how Strategic Planner is silently configured. Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>Setup.exe</td>
</tr>
<tr>
<td>/s</td>
<td><strong>Mandatory.</strong> Indicates silent mode.</td>
</tr>
<tr>
<td>/f1&lt;path\ResponseFile&gt;</td>
<td><strong>Optional.</strong> The Response file contains all the values required for a silent install. <strong>Default path</strong> = Specifies the installation destination <strong>Default ResponseFile</strong> = setup.iss</td>
</tr>
</tbody>
</table>

To change the default installation directory:

1. Copy the default response file, setup.iss, to "C:\temp"
2. Edit the setup.iss file by changing the value of **szDir** to "D:\Program Files\<Company Name>\Strategic Planner 7.9."
3. Run the installation silently from the command line:
   - `Setup.exe /s /f1"c:\temp\setup.iss"`
User Import Support Package

- **Logger Overview**, page 59
- **Manually Installing Desktop Resources**, page 51
- **User Import Support Package Silent Install Parameters**, page 87

User Import Support Package Overview

This package is used for importing individual users from a Windows domain into the Enterprise User Manager. Bulk imports are not supported using this tool.

For all software and hardware specifications refer to Chapter 2 “Customer Requirements”.

Manually Installing User Import Support Package

The manual installation procedure must be performed on the desktop on which the application will be run.

To install User Import Support Package:

1. Run the **UserImportPackageInstallation.msi** file.
   The **Welcome** screen of the setup wizard appears.
2. Click **Next**.
   The **End-User License Agreement** screen appears.
3. Select **I accept the terms in the License Agreement** and click **Next**.
   The **Custom Setup** screen appears.
   To view the required space for an application, select it in the list and read the text in the pane on the right.
4. Click **Next**.
5. If a list of missing prerequisites appears, click **Close** and then click **Cancel**. Install the missing prerequisites and restart the installation.
   When there are no missing prerequisites, the **Ready to Install** window appears.
6. Click **Install**.
   When the installation is complete, the **Installation Success** window appears.
7. Click **Finish** to exit the installation wizard.
   The **Installer Information** message appears prompting you to restart the computer.
8. Restart your computer.
User Import Support Package Silent Install Parameters

Refer to Chapter 3 “Installation by Role: Silent Distribution” for a sample script that includes the command line for distributing this application in silent mode.

The following properties determine how User Import Manager is configured silently.

<table>
<thead>
<tr>
<th>Basic Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>UserImportPackageInstallation.msi</td>
</tr>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE = 1.</td>
</tr>
<tr>
<td></td>
<td><strong>Mandatory</strong></td>
</tr>
<tr>
<td>VERINTFOLDER</td>
<td>Specifies the installation destination</td>
</tr>
<tr>
<td>GLOBAL_APP_SERVER_DNS</td>
<td>Name of the Application Server or Load Balancer.</td>
</tr>
<tr>
<td></td>
<td>Default = Empty</td>
</tr>
<tr>
<td>GLOBAL_USE_SSL</td>
<td>0 = Do not use SSL.</td>
</tr>
<tr>
<td></td>
<td>1 = Use SSL.</td>
</tr>
<tr>
<td></td>
<td><strong>Default = 0</strong></td>
</tr>
</tbody>
</table>
Chapter 5

Upgrading Desktop Applications

This chapter outlines the procedures required to upgrade Desktop Applications. The procedures for each application are listed and grouped according to the following previous versions:

- [Upgrading V11.1 Workstations](#), page 89
- [Upgrading V7 Recording Workstations](#), page 89
- [Upgrading WFM Suite Workstations](#), page 90
- [Upgrading from ULTRA 9 or Impact 360 V10](#), page 91
Upgrading V11.1 Workstations

The customer is responsible to upgrade the desktop applications before system servers upgrade.

Upgrading to V11.1 SP1 desktops includes installing V11.1 SP1 clients on top of existing clients, while ensuring all V11.1 system requirements are met. Uninstall of existing desktop applications is not required.

All desktop applications are cross-compatible with Data Center server service pack levels, with the following exceptions:

- Forecast and Scheduling clients need to be upgraded at the same time as the Data Center servers.
- For systems upgraded from V11.0 SP1 with end-to-end encryption, playback clients need to be upgraded before (or at the same time as) the Data Center servers.
- Screen capture desktops are compatible with Site servers. Therefore, you do not need to update screen capture desktops.

To upgrade desktop applications:

1. Ensure all customer requirements are met for V11.1 desktop applications. See Chapter 2 “Customer Requirements”.
2. Download the most up-to-date installation packages from the Latest Hotfixes area of the Online for Customer’s site. See “Obtaining the Installation Packages” on page 12.
3. Install V11.1 SP1 desktop applications. Follow the “Desktop Applications Installation Workflow” on page 10.

Upgrading V7 Recording Workstations

The version 7.8 Screen Capture Module and AIM Desktop Application compatible with V7.x Recorders can be upgraded to the version 11.1 Screen Capture Module and AIM for compatibility with Version 11.1 recorders.

1. Make sure the agent workstations meet the system requirements for the new version of the Screen Capture Module and AIM. See Chapter 2 “Customer Requirements”.
2. Upgrade the application by installing the new version manually or silently. See “Manually Upgrading Screen Capture Module and AIM” on page 90 or “Silently Upgrading Screen Capture Module and AIM” on page 90.

For a list of the versions of the V7.x Quality Monitoring software and the V11 Recorder servers compatible with this version of the Screen Capture Module, refer to Appendix A “Working with the Screen Capture Module” for further information.
Manually Upgrading Screen Capture Module and AIM

It is not required to manually uninstall the 7.8 version before installing the new version. Simply install the new version and the previous version is automatically removed while, all registry settings configured in the previous version are preserved.

Note that no indication is given that the older version was detected and removed. This is by design. The new version also preserves the agent.wss key file used by the old version. If encryption is enabled on the old version, preserving the agent.wss key file ensures that encryption is also enabled on the new version.

- For manual installations, see “Screen Capture and AIM” on page 73.

Silently Upgrading Screen Capture Module and AIM

When performing a silent installation, all registry settings configured in the previous version are preserved, except for those that are specifically configured with new values in the silent installation.

- For silent installation Parameters, see “Screen Capture and AIM Silent Install Parameters” on page 78.

Upgrading WFM Suite Workstations

The Desktop Applications compatible with previous WFO servers and their upgrade procedures are listed in the following table:

<table>
<thead>
<tr>
<th>WFO Desktop Application</th>
<th>Upgrade Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasting and Scheduler</td>
<td>If upgrading from release 4.5.x or 4.6.x it is required to install the Director Enterprise Client. See Uninstalling the 4.5.x / 4.6.x Director Enterprise Client, page 91. Reinstall by running the following script located on the media: <code>&lt;Desktop Applications installation folder&gt;\ForecastingAndScheduling\ReInstallForecastingandScheduling.cmd</code> All default settings are automatically retrieved from the previous version and applied in the new version.</td>
</tr>
<tr>
<td>Strategic Planner</td>
<td>Install the new version. See “Strategic Planner Client” on page 84. Installing the new version automatically retrieves all default settings from the previous version.</td>
</tr>
<tr>
<td>Pop-Up Notification Client</td>
<td>Reinstall by running the following script located on the media: <code>&lt;Desktop Applications installation folder&gt;\Pop-up Client\ReInstall.cmd</code> All default settings are automatically retrieved from the previous version and applied in the new version.</td>
</tr>
</tbody>
</table>
Uninstalling the 4.5.x / 4.6.x Director Enterprise Client

Forecasting and Scheduling client installer uses MSI (Microsoft Installer) technology. It is required to first uninstall all previous InstallShield versions of the Director Enterprise clients before installing the new MSI version of Forecasting and Scheduling.

1. Click Start > Settings > Control Panel > Add/Remove Programs.
2. Select Blue Pumpkin Director Enterprise Client, and then click Change/Remove.
3. In the Welcome screen, select Remove, and then click Next.
4. At the Confirm message, click OK
5. In the Maintenance Complete dialog box, click Finish.

Upgrading from ULTRA 9 or Impact 360 V10

Prior to upgrading and migrating the ULTRA 9 hubs or Version 10 data centers, all ULTRA 9 / V10 desktop applications must be upgraded. In addition, new V11.1 desktop applications are installed to support a transition to V11.1 recording or when expanding the solution with additional applications.

During the transition period before the data center is upgrades, V11.1 recording clients and V11.1 SP1 acquisition recording clients (including Citrix/terminal services environments) record side-by-side.
The below workflow must be followed when upgrading from ULTRA 9 or V10. On completing each procedure return to the workflow.

1. **Backup**
   - U9/V10 Workstations

2. **Uninstall**
   - U9/V10 Workstations

3. **Install & Restore**
   - Install V11 Agent Workstations for Acquisition Recording
   - And restore U9/V10 configuration settings

4. **Install**
   - V11.1 Supervisor, Manager, and Administrative Workstations

5. **Verify**
   - Workstation are Compatible with U9/V10 Hubs

6. **Install**
   - V11.1 Agent Workstations for Recording

7. **Upgrade and Migrate Data Center**
   - See ULTRA 9 to Impact 360 V11.1 Upgrade and Migration Guide
   - See V10 QM & Analytics to Impact 360 V11.1 Upgrade and Migration Guide

8. **V11 Acquisition Recorders deployed?**
   - No
     - End of Workflow
   - Yes
     - Uninstall V11 Desktop Applications for Acquisition Recording

Agent workstations are now installed in parallel with V11.1 Desktop Applications for Recording and V11 Desktop Applications for Acquisition Recording.

Upgrade and migration to Impact 360 V11.1 is complete.
Backup ULTRA 9/V10 Workstations

Begin by backing up the registry keys. For backup it is required to export certain configuration registry keys to a backup location. This allows for the U9/V10 configuration settings to be later restored.

To back up U9/V10 registry keys:

1. Open the Registry Editor by selecting **Start>Run>Regedit**.
2. Right click the Registry Keys and select **Export**.

The relevant registry keys per application are listed here:

**NOTE** If a specific key does not exist, continue with the remaining keys and the procedure.

<table>
<thead>
<tr>
<th>ULTRA V9 Desktop Applications</th>
<th>Registry Paths for Backup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playback</td>
<td>[HKEY_LOCAL_MACHINE\SOFTWARE\Verint\Samurai\Proxy]</td>
</tr>
<tr>
<td>Record on Demand</td>
<td>[HKEY_USERS.DEFAULT\Software\Comverse\RecordOnDemand]</td>
</tr>
<tr>
<td></td>
<td>[HKEY_CURRENT_USER\Software\Comverse\RecordOnDemand]</td>
</tr>
<tr>
<td></td>
<td>[HKEY_LOCAL_MACHINE\SOFTWARE\Comverse\RGC]</td>
</tr>
<tr>
<td></td>
<td>[HKEY_LOCAL_MACHINE\SOFTWARE\Comverse\Apps]</td>
</tr>
<tr>
<td>Screen Acquisition Agent</td>
<td>[HKEY_LOCAL_MACHINE\SOFTWARE\Verint\Screens]</td>
</tr>
<tr>
<td>IntelliLink Agent</td>
<td>[HKEY_LOCAL_MACHINE\SOFTWARE\Verint\ILA]</td>
</tr>
<tr>
<td></td>
<td>[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Eventlog\Application\ILA]</td>
</tr>
<tr>
<td></td>
<td>[HKEY_LOCAL_MACHINE\SOFTWARE\Comverse\Install]</td>
</tr>
</tbody>
</table>

3. Save the relevant registration files (*.reg) at a backup location.
Uninstall ULTRA 9/V10 Workstations

After backing up the workstation registry keys, uninstall the ULTRA 9/ V10 desktop applications.

- Uninstalling ULTRA V9 Desktop Applications, page 94
- Uninstalling Impact 360 V10 Desktop Applications, page 95

Uninstalling ULTRA V9 Desktop Applications

Before you Begin

Before you uninstall the U9 Desktop Applications, set aside one workstation per site that is installed with the U9 Form Designer and U9 User Manager and do not uninstall this workstation. This is required for a gradual scenario. In addition, do not install Windows 7 on this machine.

Silent Uninstall

Use this method to uninstall all ULTRA V9 Desktop Applications simultaneously from multiple remote workstations using a batch file.

- Push the following command to the workstations:

  `msiexec /x {982AF7AB-9939-11D6-817D-00105AB492EA}`

  When this command is executed, all ULTRA V9 Desktop Applications on all the workstations are removed.

Manual Uninstall

Use this method to uninstall all the ULTRA V9 Desktop Applications on a workstation manually:

1. From **Add/Remove Programs**:
   
   a. Remove any **ULTRA U93 patches** from the workstations. For example:

      - ULTRA ILA patch U93_XXXX.
      - ULTRA Screen Agent patch U93SPX_XXXX
      - ULTRA Playback Patch U93_1866

   a. Select the **ULTRA 9 desktop** program and click **Remove**.

      All the ULTRA V9 Desktop Applications are removed from the workstation.

2. When prompted to restart the computer, click **Yes**. The computer reboots and the uninstall is complete.
Uninstalling Impact 360 V10 Desktop Applications

You can remove the entire Desktop installation, silently or manually:

- **Silent Uninstall**, page 95
- **Manual Uninstall**, page 95

**Silent Uninstall**

Use this procedure when you do not have access to the .msi file used to install Desktop applications.

1. From the **Start** menu, select **Run** to open the Command Line Interface (CLI).
2. Type **Cmd** and click **OK**.
3. Type `msiexec /u {EB30A3F1-4CB4-45B0-833C-F186EF25484F}
4. Click **Enter** to remove all Desktop applications.
5. Restart your computer.

**Manual Uninstall**

1. From the **Start** menu, select **Settings > Control Panel > Add or Remove Programs** (Windows Vista, Windows 7 or Windows 2008) or **Programs and Features** (Other Windows platforms).
2. Select **Impact 360 Desktop Applications** and click **Remove**.
The system removes all Desktop applications.
3. Restart your computer.
The computer reboots, and the uninstall process is complete.

Install and Restore V11 SP1 Agent Workstations for Acquisition Recording

After the ULTRA 9/V10 workstation backup and uninstall, install Agent Workstations with the most up-to-date V11 desktop applications for acquisition recording. The V11 acquisition clients are compatible with V11.1 systems.

1. Download the most up-to-date installation packages from the V11 SP1 Latest Hotfixes on the Verint Online for Customer’s site.
   a. Browse to **Impact 360 V11 > Support & Downloads > Latest Hotfixes and HFRs**.
   b. Expand the Hotfixes Tree to **Impact 360 V11 > V11.0 > SP1** and filter by **Desktop**.
   c. Click the Desktop Application from the **Subsystem** column and in the Subsystem Description window, click the **Download Link**. It is in the format KB106XXX.
d. In the Directory window, download the KB11XXXX.zip containing the up to date installation package for the desktop application.

2 Install agent workstations for acquisition recording. See Appendix C “Installing V11 SP1 Agent Workstations for Acquisition Recording”.

3 Restore the workstation configuration settings. See “Restoring Configuration Settings” on page 96.

Restoring Configuration Settings

Once the latest acquisition recording clients are installed, it is required to restore the configuration settings that were previously backed up.

1 Restore U9/V10 Registry Keys. This restores the Desktop Applications configuration settings.
   a. Browse to the backup location of the registration keys defined in Step 3 of “To back up U9/V10 registry keys:” on page 93.
   b. Double-click each registration file and then click Yes to add the information in the file to the registry.

2 For gradual upgrades, return CTI Link Agent Registry Key to ULTRA 9 Values.
   During a gradual, site-by-site upgrade scenario, workstation support for ULTRA 9 is continued while workstation support for V11 is simultaneously introduced.
   a. Browse to the registry: [HKEY_LOCAL_MACHINE\SOFTWARE\Verint\ILA]
   c. The CTI Link Agent interface appears with ULTRA V9 IntelliLink Agent terminology.

3 When the gradual upgrade to V11 Acquisition Recording is complete, update the registry keys to V11 values.
   a. Review the registry keys of all installed Desktop Applications for the server or IP addresses and update them to the relevant V11 server address.
   • For Agent Workstations with V11 Screen Capture for Acquisition Recording:
     Registry: [HKEY_LOCAL_MACHINE\SOFTWARE\Verint\ILA]
     Key: Infolink IP
     New Value: HTTP/HTTPS Alias of the server hosting the Acquisition Integration Service server role.
     Resolve the HTTP/HTTPS Alias by browsing to the Enterprise Settings and selecting the Consolidated or Acquisition Server > Additional Settings > HTTP/HTTPS Alias.
For agent workstations with **V11 Record On-Demand**:

**Registry**: [HKEY_LOCAL_MACHINE\SOFTWARE\Comverse\RGC]

**Key**: ServerAddress

**New Value**: HTTP/HTTPS Alias of the Application Server.

Resolve the HTTP/HTTPS Alias alias by browsing to the Enterprise Settings and selecting the Consolidated or Application Server > Additional Settings > HTTP/HTTPS Alias.

b. For Agent Workstations with **V11 CTI Link Agent**:

i. Browse to the registry:

[HKEY_LOCAL_MACHINE\SOFTWARE\Verint\ILA]

ii. Update the value of the **ImpactVersion** key to 11.

c. The CTI Link Agent Interface is updated with V11 terminology.

**Install V11.1 Supervisor/Manager and Administrator Workstations**

1. Install V11 Supervisor/Manager Workstations
2. Install V11 Administrator Workstations
3. Install V11 Enterprise Administrative Workstations

See Chapter 3 “Installation by Role: Silent Distribution” or Chapter 4 “Installation by Application”.

**Verify V11 Workstation Compatibility with U9/V10 Hubs**

At this stage, the Hubs are at U9/V10 level and the desktops are installed with V11 Desktop Applications. Perform the following sanity tests to verify acquisition compatibility.

1. From an Agent Workstation, use the Record On Demand (ROD) application to initiate recording.
2. From a Supervisor workstation, browse to the Portal and search for the contact recorded using ROD.
3. Verify that Playback of the recorded contact is working properly.

**Install V11.1 Agent Workstations for Recording**

This section is relevant for systems upgrading to V11.1 Recording. This in effect creates a side-by-side installation, whereby both V11 Acquisition Recording Desktop Applications and V11.1 Recorder Desktop Applications are installed on the same workstation. This is in preparation for transitioning to V11.1 Recording and allows you to work with U9/V10 and V11.1 in parallel.
- Install Agent Workstations with V11.1 Desktop Applications for Recording. See Chapter 3 “Installation by Role: Silent Distribution” or Chapter 4 “Installation by Application”.

**Uninstall V11 Desktop Applications for Acquisition Recording**

This section is relevant for systems that fulfill the following criteria:
- All sites and data center have fully transitioned to V11.1 Recording.
- No V11 Acquisition Recorders are deployed.

<table>
<thead>
<tr>
<th>Uninstall</th>
<th>Manually</th>
<th>Silently</th>
</tr>
</thead>
<tbody>
<tr>
<td>V11 Acquisition Screen Recording</td>
<td>From Add/Remove Programs, uninstall Impact 360 ScreenRecording</td>
<td>Run this script: MsiExec.exe /I{F95B529F-C3F7-4212-AD59-A56F9C586151}</td>
</tr>
<tr>
<td>V11 Record on Demand</td>
<td>From Add/Remove Programs, uninstall Impact 360 Record On Demand.</td>
<td></td>
</tr>
<tr>
<td>V11 CTI Link Agent</td>
<td>From Add/Remove Programs, uninstall Impact 360 ILA.</td>
<td>Run this script: MsiExec.exe /x {156688A2-30A0-46B6-A8D3-32E65C0951F2}</td>
</tr>
</tbody>
</table>
System Administration for Desktop Applications

- Site-Dependent Playback (Optional), page 100
- Application Configuration Updates, page 101
Site-Dependent Playback (Optional)

Site-dependent playback means that the registry in the user’s Desktop is configured manually to include a special key that indicates to the application’s Locator to first search in all storage locations in a specific site for the contact before searching for the contact in other sites.

The purpose of site-dependent playback is to help minimize WAN traffic between different physical sites by prioritizing to stream a copy of the file that is local, rather than needlessly transferring data across the WAN.

This is an optional configuration. The system is developed to search for contacts to playback according to a default flow sequence. Configuring desktops with the Site ID overrides the default flow and is only relevant in cases of deployments with WAN connectivity.

Implementation involves configuring desktops with three registry keys with site ID for playback, telephony playback, and real-time monitoring.

- **Locator for site-dependent playback:** During playback, media is streamed to the desktop from the local site with a Content Server.
- **TPS for site-dependent telephony playback:** During telephony playback, playback lines are allocated to the desktop from the local site with a Telephony Playback Server or TPS Server Role to prevent long distance call tariffs.
- **RTP for site-dependent real-time monitoring:** During real-time monitoring, media is streamed to the desktop from the local site with an Integration Service server role mapped to the extension that is monitored.

**SEE ALSO**

The Technical Overview details the default data flow for Playback, TPS and RTP. Site-dependent playback data flow is also detailed. See the chapter entitled Data Flows.

Configuring Desktops for Site-Dependent Playback

Complete this procedure following enterprise configuration.

1. In the Enterprise Settings, make a note of the Site IDs for the local Content Server, TPS and Recorder Integration Service.
   
   The Enterprise Manager assigns a unique ID to each site or site group when the enterprise hierarchy is configured.

2. Update the following desktop registry key with site ID values for playback, telephony playback, and real-time playback.
   
   For Windows 32-bit systems:
   
   [HKEY_LOCAL_MACHINE\SOFTWARE\Verint\Desktop\SiteId]
   
   For Windows 64-bit systems:
   
   [HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Verint\Desktop\SiteId]
   
   Set the following values (string, type REG_SZ):
Chapter 6 - System Administration for Desktop Applications

Application Configuration Updates

It is required to update the Desktop Applications’ configuration files in the following cases:

- Server or Load Balancer Name Change, page 101
- Server Transition to/from SSL, page 101
- Transition to/from Encrypted Playback, page 102

Server or Load Balancer Name Change

There are Desktop Applications that rely on communication with the system server roles or Load Balancer (LB). When a change is made, a corresponding change to the Desktop Applications configuration is required.

Name changes can occur when:

- IT policy computer name changes
- Expansion scenarios
- Server joins a different domain
- Load Balancer (LB) name change

The configuration files to update are detailed according to the relevant server role. See Updating Configurations by Server Role, page 102.

Server Transition to/from SSL

When moving the system to/from a secure SSL system and the server SSL certificate name was entered during the Desktop Applications installation, it is required to update the relevant configuration keys with the new certificate name.

The configuration files to update are detailed according to the relevant server role. See Updating Configurations by Server Role, page 102.

Trusting SSL Certificate Authority

When an existing non-SSL system is transitioned to a SSL system, the desktop application initiates a handshake process with the server and the SSL server application
responds with its own server certificate for verification. In order for Desktop Applications to trust the SSL server certificate, it must trust the Certificate Authority. To this end, the certificate of the Certificate Authority must be included in the list of Trusted Root Certification Authorities stored on the workstations running desktop applications.

Transition to/from Encrypted Playback

Playback is configured for encryption during installation. If a change is made to or from encrypted playback, it is required to update the Playback configuration files. The KeyProxyWebService playback registry key to update is detailed according the relevant server role. See Framework Applications/Interaction Applications Server Role, page 102. In addition, it is required to reinstall Playback at SP1 level if an existing SP0 system with non-encrypted playback was upgraded to SP1. If there is no change to the encryption requirement, than reinstall of Playback is not required.

Updating Configurations by Server Role

This section details the configuration files that require updating, grouped by the server role that communicates with the desktop application.

- **Recorder Integration Service Server Role**, page 102
- **Framework Applications/Interaction Applications Server Role**, page 102

Recorder Integration Service Server Role

**Screen Capture Module**

**Key:** IntegrationServicesServersLis  
**Key Location:** HKEY_LOCAL_MACHINE\SOFTWARE\Witness Systems\eQuality Agent\Capture\CurrentVersion  
**Update Required for SSL Transitions?** Yes. For SSL support of Screen Transport Protocol see the section on Screen Encryption in the Security Overview Configuration Guide.

Framework Applications/Interaction Applications Server Role

- **Playback**, page 103  
- **Form Designer**, page 103  
- **Real Time Speech Calibration Application**, page 104  
- **Desktop Gadget**, page 104  
- **Forecast and Scheduling**, page 105  
- **Pop-up Notification Client**, page 105
**Playback**

1. **KeyProxyWebService**
   - **Key Location:**
     - On 32-bit versions of Windows: HKEY_LOCAL_MACHINE\SOFTWARE\<Company Name>\CryptoSDK
     - On 64-bit versions of Windows: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\<Company Name>\CryptoSDK
   - **Key Value (string):** https://<server or LB name>/KeyProxy/ManagementService.asmx
   - Update required for SSL Transitions? Support for SSL is static. No change required.

2. **AuthURL**
   - **Key Location:** HKEY_LOCAL_MACHINE\SOFTWARE\<Company Name>\CryptoSDK
   - **Key Value (string):** http://<server or LB name>:<7001/wfo/control/signin
   - Update required for SSL Transitions? Yes. When moving to SSL it is required to change HTTP to HTTPS, and to change the port number to 7002.

**Form Designer**

1. **Verint.EvaluationPackage.FormManagement.FormManagementControlLibrary.FormManagementWS.FormManagementWS**
   - **Key Location:** <Software Drive>:\Program Files\<Company Name>\FormDesigner\Verint.EvaluationPackage.FormManagement.FormManagementUI.exe.config
   - **Key Value (string):** http://<server or LB name>/FormManagementWS/FormManagementWs.asmx
   - Update required for SSL Transitions? No change required.

2. **Verint.EvaluationPackage.FormManagement.FormManagementControlLibrary.FormManagementWS.FormManagementWS.HTTPS**
   - **Key Value (string):** https://<server or LB name>/FormManagementWS/FormManagementWs.asmx
   - Update required for SSL Transitions?: No change required.

3. **FilloutPathForPreview**
   - **Key Value (string):** http://<server or LB name>/Fillout/EvaluationForm.aspx
   - Update required for SSL Transitions?: Yes

4. **AuthUrl**
   - **Key Value (string):** http://<server or LB name:7001>/wfo/control/signin?screen=QM_ACTIVEX_LANDING_PAGE&integrationURL=magic
   - Update required for SSL Transitions? Yes
Real Time Speech Calibration Application

1 Server
   - Key Location: HKEY_LOCAL_MACHINE\SOFTWARE\Impact360\KWS Calibration
   - Key Value (string): <server or LB name>
   - Update required for SSL Transitions?: No

2 SSL
   - Key Location: HKEY_LOCAL_MACHINE\SOFTWARE\Impact360\KWS Calibration
   - Key Value: Yes/No
   - Update required for SSL Transitions: Yes

3 WFO Port
   - Key Location: HKEY_LOCAL_MACHINE\SOFTWARE\Impact360\KWS Calibration
   - Key Value: <WFO Port>
   - Update required for SSL Transitions: Yes

Desktop Gadget

1 Serverurl
   - Key Location:
     HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Impact360\DesktopGadget
   - Key Value: http://<server or LB name:7001>/wfo/
   - Update required for SSL Transitions: Yes

2 SSOmode
   - Key Location:
     HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Impact360\DesktopGadget
   - Key Value: <true>
   - Update required for SSL Transitions: No

3 Serverurl (user)
   - Key Location:
     HKEY_CURRENT_USER\SOFTWARE\Wow6432Node\Impact360\DesktopGadget
   - Key Value: http://<server or LB name:7001>/wfo/
   - Update required for SSL Transitions: Yes

4 SSOmode (user)
   - Key Location:
     HKEY_CURRENT_USER\SOFTWARE\Wow6432Node\Impact360\DesktopGadget
   - Key Value: <true>
   - Update required for SSL Transitions: No
Forecast and Scheduling

In this case, the Framework Application Server or Application Load Balancer name is updated from within the application manually:

1. In the login window, hold the Ctrl+Shift keys and click User Name.
2. Update the Application Server or Load Balancer name and port.

If SSL is enabled, no additional configuration is required as all web pages launched from the application automatically uses SSL. However, if the system is transitioned from SSL to non-SSL, Forecasting and Scheduling retains the SSL configuration. Please contact your account manager to revert to non-SSL.

Pop-up Notification Client

The Pop-up Notification systems works by SIP based client-server communication. DNS_SIP entries in the IP network containing the pop-up server’s name and domain are located by the pop-up client as required.

Perform the steps in this section if you are changing the computer name and/or the domain membership of the pop-up server(s).

To update server name when workstation and server are in the same domain:

- Update the DNS_SIP entry to point to the correct server. This is a manual procedure and performed by the customer.

To update domain membership when workstation and server are in the same domain:

1. Create new DNS_SIP entry in the new domain. This is a manual procedure and performed by the customer.
2. Update all Pop-up clients with the new domain. This is performed by the customer, usually by SMS push to all workstations.
3. Update the Pop-up domain name in the Pop-up Server configuration:
   a. In the Enterprise Manager Server Settings, select the Framework Applications Server Role.
   b. In the Pop-up Server section, enter the new Pop-up Domain value and save the configuration. This distributes the domain membership change to the .inin and bpmaindb files.

To update domain membership of the workstations only:

- Update the DNS_SIP entry to point to the correct domain. This is a manual procedure and performed by the customer.
Appendix A

Working with the Screen Capture Module

You can install the Screen Capture Module to work with the Recorder server, the Quality Monitoring Application, or the Version 7 Quality Monitoring Product. For Screen Capture Module installations instructions, see “Screen Capture and AIM” on page 73.

This appendix includes additional information about the Screen Capture Module software. Review this section before installing the Screen Capture Module to ensure that you can install and configure the application to operate successfully in your environment.

This appendix discusses the following topics:

- Screen Capture Module Compatibility, page 107 - Lists the versions of the Quality Monitoring software and the Recorder servers that are compatible with this version of the Screen Capture Module.

- Installation in a Citrix or Terminal Services Environment, page 108 - Explains the unique considerations and configurations associated with installing the Screen Capture Module on a Citrix server or a Terminal Services server. Read this section to understand how to get optimum performance from Screen Capture Modules installed in a Citrix or Terminal Services environment.

- Screen Capture and AIM Registry Settings, page 111 - Discusses all of the registry settings for the Screen Capture component and the Agent Initiated Monitoring (AIM)
component of the Screen Capture Module. Use the registry settings to fine tune the performance or to change the application configuration after it is installed.

- **Configurations Needed to Support AIM Call Annotation**, page 124 - Explains all configurations you must perform to enable agents to annotate calls from the AIM application.
- **Enabling Multi-Monitor Screen Capture Support**, page 129 - Explains how to record screen images on agent workstations that have multiple monitors.
- **Known Issues**, page 130 - Discusses the known issues with the Screen Capture Module.
- **CapTestB Utility**, page 135 - Typically installed on an IT Administrator workstation for testing the performance of the screen capture application installed on the Agent Workstation for Recording.

## Screen Capture Module Compatibility

This table describes the Screen Capture Module 11.0 compatibility with different versions of the Quality Monitoring software and the Recorder server. Review this information when installing the Screen Capture Module in environments that include both V11 servers and servers from earlier releases.

**NOTE**

In the V11 release, the Quality Monitoring Application (along with other applications) is available on a server that has the Interaction Applications server role activated. With the Version 7 Quality Monitoring releases, the QM software was deployed on a dedicated server.

The Screen Capture Module 11.0 can work with the Quality Monitoring software and Recorder versions listed in this table.

<table>
<thead>
<tr>
<th>Supported Versions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality Monitoring</strong></td>
<td></td>
</tr>
<tr>
<td>11.0</td>
<td>Fully Supported</td>
</tr>
<tr>
<td>7.8 SP2</td>
<td>Fully Supported</td>
</tr>
<tr>
<td>7.8 SP1</td>
<td>Fully Supported</td>
</tr>
<tr>
<td>7.7</td>
<td>Partially Supported*</td>
</tr>
<tr>
<td><strong>Recorder</strong></td>
<td></td>
</tr>
<tr>
<td>11.0</td>
<td>Fully Supported</td>
</tr>
<tr>
<td>7.8</td>
<td>Fully Supported</td>
</tr>
</tbody>
</table>
Quality Monitoring v7.8.2 product and Recorder v11 server compatibility with different versions of Screen Capture Module:

<table>
<thead>
<tr>
<th>Screen Capture Module Version</th>
<th>QM 7.8.2</th>
<th>Recorder V11</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.0</td>
<td>Fully Supported</td>
<td>Fully Supported</td>
</tr>
<tr>
<td>7.8 SP2 QM</td>
<td>Fully Supported</td>
<td>Fully Supported</td>
</tr>
<tr>
<td>7.8 SP1</td>
<td>Fully Supported</td>
<td>Only Desktop Screen Capture is supported. Citrix and Terminal Services are not supported.</td>
</tr>
<tr>
<td>7.8 - Recorder</td>
<td>Fully Supported</td>
<td>Only Desktop Screen Capture is supported. Citrix and Terminal Services are not supported.</td>
</tr>
<tr>
<td>7.7 - QM</td>
<td>Partially Supported*</td>
<td>Not Supported.</td>
</tr>
<tr>
<td>7.6, 6.5, 6.4 and 6.3</td>
<td>Not Supported</td>
<td>Not Supported.</td>
</tr>
</tbody>
</table>

* Supported only if Data Encryption features are disabled (the data encryption algorithm changed from the Blowfish Algorithm to the AES256 algorithm). To disable Data Encryption, disable the Data Encryption setting during the Screen Capture installation, or set the DataEncryption registry setting to 0, as discussed in “Screen Capture Registry Values” on page 112.

Installation in a Citrix or Terminal Services Environment

This section discusses special considerations and configurations of which you should be aware when installing the Screen Capture Module on a Citrix or Terminal Services server. This section discusses the following topics:

- Supported Terminal Server Sessions, page 108
- Limitations and Best Practices, page 109
- Memory Utilization on a Terminal Server, page 111

Supported Terminal Server Sessions

For details about supported Citrix or Terminal Services environments, see “Thin Clients and VMware” on page 17.

Screen Capture is supported for the following types of Terminal Server sessions:

- Anonymous Terminal Session (where remote terminal host name is not available)
- Named Terminal Session (where remote terminal host name is available)
The Recorder server also supports Agent Initiated Monitoring (AIM) in remote sessions where the system tray is displayed; the AIM icon is available only in the system tray. The screens captured in a terminal services, or Citrix, environment are saved in the Recorder server call buffer in the same format as other desktop screen data.

**VMware Environments and Screen Capture**

The information in this section applies only to Screen Capture for Agent Workstations in Quality Monitoring (QM) environments.

If VMware Infrastructure (ESX) is used, a static host name is required per virtual machine. We recommend using Dynamic Workspaces with Agent Initiated Monitoring (AIM) in Virtual Desktop Infrastructure (VDI) environments. AIM is used to register a logon from the Virtual Desktop to the BDR when the agent logs in.

If it is not feasible to use Dynamic Workspaces, you can use Static Workspaces with the following requirements:

- A “fixed seating” environment must be in place with respect to the telephone. The agent must sit at the same fixed extension, or “carry” the extension with him/her in an environment that supports extension mobility.
- The VDI system should be configured for a persistent pool of virtual desktops.
- We recommend that the persistent pool of virtual machines be pre-assigned to the agents to allow the workspaces to be created in Quality Monitoring and assigned to the proper telephone. This can be accomplished in VMware View using the VMware View Manager tool.

**Limitations and Best Practices**

There are some limitations surrounding screen capture of multiple sessions and/or Published Applications in Windows Terminal Services and Citrix environments. This section discusses best practices you can employ to minimize these limitations.

**Citrix Published Applications Screen Capture Limitations**

In capturing screens for Published Applications, the Recorder server records only one Citrix session at a time per agent.

The capture depends on the type of Citrix session.

If the Citrix Session is:

- A Published Server Desktop session, then it will record all activities in that Desktop session.
- An individual Published Application session, then it will record only that particular Published Application. In this scenario, you can configure explore.exe as the individual Published Application and add shortcuts to other applications in a Windows folder. All applications opened from within this folder will run in the explorer.exe session. This configuration allows you to record all activities from multiple applications even though only a single application (explorer.exe) is published. See the “Configuration Details” on page 110 for instructions on...
configuring explorer.exe as the Published Application.

- A session that is shared between Published Applications, then it will record all the Published Applications in that session. Published Applications with common properties (color depth, resolution, encryption etc.) can be configured to share the same session within Citrix. Refer to http://support.citrix.com/kb/entry.jspa?externalID=CTX159159 for session sharing details.

The limitations for the capture are as follows:

- Multiple simultaneous sessions cannot be recorded, as noted below:
  - If the agent opens multiple Published Applications (not by session sharing) from a single Citrix Server, then recording of only one session will occur.
  - If the agent opens multiple Published Applications from different Citrix servers in a Citrix server farm, then recording of only one session will occur.

- The session that is recorded is the session most recently created. For example, if the agent first opens Email as a published application on one server and then CRM as an application on a different server, the CRM application session will be recorded and associated with his next call. If he opens CRM first and Email second, then Email will be recorded.

**Configuration Details**

To enable the recording of all Published Applications in circumstances where the determination of which screen should be recorded is not predictable:

- Restrict each agent to work on a single Citrix Server in a Citrix Server Farm at a particular time. Do not allow the agent to connect to multiple Citrix Servers in the Server Farm.

- Record all Applications an agent uses, by doing one of the following:
  - Configure Published Applications to share the same session.
  - Publish the Server Desktop and allow agents to access all the applications through the Desktop session.
  - Configure explorer.exe as the Published Application and give one of the folder names as the argument. In that folder, use Windows Explorer to create file shortcuts to applications. When the explorer.exe program is launched, it opens the folder containing the shortcuts. Only one session will be created on the Citrix Server when explorer.exe program is launched. Use the shortcuts available from the folder in explorer.exe to launch the applications. All applications launched using the shortcuts will run in the same explorer.exe session.

**Windows Terminal Services (without Citrix) Screen Capture Limitations**

In capturing screens under Windows Terminal Services, the Recorder records only one Windows Terminal Session at a time per agent. It records all the activities in that Terminal Session.
The limitations of the capture are as follows:

- If the agent opens Multiple Terminal Sessions from different Windows Terminal Servers then recording of only one session will occur.
- If the agent opens Multiple Terminal Sessions from a single Windows Terminal Server then recording of only one session will occur.
- The session that is recorded is the session most recently created. For example, if the agent first opens Email on one server and then CRM as an application on a different server, the CRM application session will be recorded and associated with his next call. If the agent opens CRM first and Email second, then Email will be recorded instead.

**Configuration Details**

To enable the recording of all activities in circumstances where the determination of which screen should be recorded is not predictable:

- Restrict each agent to working on a single Windows Terminal Server and to the single Terminal Session. Allow the agent to access all of the applications through the terminal session.

**Memory Utilization on a Terminal Server**

Use the following formula to estimate the capture memory utilization:

\[ M = 2000 + \frac{(4*H*W*D)}{1000} \]

Where:
- \( M \) - memory per user in KB
- \( H \) - screen height in pixels
- \( W \) - screen width in pixels
- \( D \) - color depth in bytes

**Screen Capture and AIM Registry Settings**

You can change the Windows registry settings after installation to fine tune the Agent Capture Service or Agent Initiated Monitoring (AIM) performance or to enable additional capabilities in these applications after the applications have been installed.

This section provides reference information for all of the registry keys available for the Agent Capture Service and the Agent Initiated Monitoring (AIM) applications, including the possible values for each key.

**Registry Key Locations**

The Screen Capture registry keys are located in:

\[ HKLM\SOFTWARE\Witness Systems\eQuality Agent\Capture\CurrentVersion \]
For information on the individual Agent Capture Service registry keys, see “Screen Capture Registry Values” on page 112 and “Registry Values for Terminal Services Support” on page 116.

The AIM registry keys are located in:
HKLM\SOFTWARE\Witness Systems\AIM
For information on the individual AIM registry keys, see “AIM Registry Values” on page 116.

**WARNING** Use caution when changing registry values. Editing the registry may cause the program to become unstable.

### Screen Capture Registry Values

The Screen Capture registry keys are located in:
HKLM\SOFTWARE\Witness Systems\eQuality Agent\Capture\CurrentVersion

Screen Capture uses the following registry values. The Screen Capture executable name is WcapW32.exe.

<table>
<thead>
<tr>
<th>Registry Entry</th>
<th>Description</th>
<th>Type</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CaptureMethod</td>
<td>Screen capture method:</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1 - Enhanced</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DualMonitor</td>
<td>Add this setting if it is missing in the registry. Values include:</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0 - Dual monitor recording disabled</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Dual monitor recording enabled</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>See “Configurations Needed to Support AIM Call Annotation” on page 124 for specific details on the dual monitoring recording support.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CaptureRunPath</td>
<td>Agent Capture Installed directory path.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>CompressionMethod</td>
<td>Compression algorithm to use:</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1 - Enhanced</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 - Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 - Microsoft RLE8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 - JPEG Compression</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 - 5.x Compatible</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 - 6.x Compatible (6.3 and below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ColorReduction</td>
<td>Reduce the number of colors captured to 256.</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0 - Off</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - On</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Registry Entry Description

<table>
<thead>
<tr>
<th>Registry Entry</th>
<th>Description</th>
<th>Type</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AgentSocketPort</td>
<td>Socket TCP port number to listen on for connection request from the recorder server when the Screen Capture Module is installed on an agent’s PC.</td>
<td>REG_DWORD</td>
<td>4001</td>
</tr>
<tr>
<td>EnhancedResolution</td>
<td>Causes Capture to continuously fake a constant monitor to artificially use CPU and memory resources even when a monitor is not in progress: 0 - Off 1- On</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td>WSSPath</td>
<td>Directory path to the &quot;agent.wss&quot; file used by WCapW32.exe during server authentication and data encryption.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>DataEncryption</td>
<td>If this is set to 1, Capture encrypts the screen data before sending it to the recorder server. 0 - Not Encrypted 1 - Encrypted</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td>ScreenChangeDetectionInterval</td>
<td>This setting defines how often (in msec) the capture will check for screen changes. The setting range is 25 - 500. Lowering the value will increase the capture quality and the amount of CPU used by capture. The setting can be automatically adjusted by the capture if the CPU utilization exceeds the value set by the MaxAvgCPU.</td>
<td>REG_DWORD</td>
<td>150</td>
</tr>
<tr>
<td>CaptureLayeredWindows</td>
<td>Set this value to 1 to captured layered windows, such as transparent windows, tool tips, etc. Setting this value to 1 increases the Screen Capture software CPU utilization. 0 - Enabled 1 - Disabled</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td>CompressionQuality</td>
<td>Compression Quality in the range 1 to 10 10 - Best compression (Low Performance) 1 - Less Compression (Best Performance) <strong>Note:</strong> This setting applicable only when 'CompressionMethod' is 1 or 4.</td>
<td>REG_DWORD</td>
<td>5</td>
</tr>
<tr>
<td>MaxAvgCPU</td>
<td>The setting limits the amount of CPU (in percents) the capture can use.</td>
<td>REG_DWORD</td>
<td>60</td>
</tr>
</tbody>
</table>
Setting Specific Screen Capture Entries

Changing the values of certain registry entries will affect the Screen Capture software performance, recording quality, and network bandwidth usage.

Setting the appropriate registry values based on the Agent machine configuration makes the Screen Capture Module operate most efficiently.

**IMPORTANT** The registry settings discussed below all affect the image quality of screen captures. You can also specify similar settings that affect the image quality of screen captures from the Enterprise Manager application when configuring workstation groups for screen recording.

If an image quality setting is specified for a workstation group in Enterprise Manager, that setting takes precedence over the registry setting. For more information, see “Screen Capture and AIM Post Installation Notes” on page 78.

**CaptureMethod**

Set the CaptureMethod to 1 (Enhanced) for a good screen change detection method. When CaptureMethod is set to 1, the screen recording playback usually has no tiling behavior; however, the playback uses more CPU than other methods.

Set the CaptureMethod to 2 (Normal) for efficient CPU utilization. When CaptureMethod is set to 2, you may see tiling in the playback.

**CompressionMethod**

The following table lists the supported compression methods and their metrics.

<table>
<thead>
<tr>
<th>Compression Method</th>
<th>Avg. Compression Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Compression</td>
<td>8:1</td>
</tr>
<tr>
<td>Microsoft RLE8 Compression</td>
<td>2:1</td>
</tr>
<tr>
<td>Enhanced Compression</td>
<td>40:1</td>
</tr>
<tr>
<td>JPEG Compression</td>
<td>40:1</td>
</tr>
</tbody>
</table>
Appendix A - Working with the Screen Capture Module

Screen Capture and AIM Registry Settings

**CompressionQuality**

The Compression Quality entry is applicable only when 'Enhanced Compression' or 'JPEG Compression' is used.

A setting of 10 produces the best compression quality and the smallest packets. It uses slightly more CPU. This setting conserves the most bandwidth but reduces the quality of the screen images when they are played back.

A setting of 1 results in lower quality compression. This setting uses the most network bandwidth and produces the best image quality when the recorded screen images are played back.

**ColorReduction**

New installations of the Screen Capture Module will have the ColorReduction value set to 1 (on). However, upgrade installations of the Screen Capture Module will keep the existing ColorReduction value.

When color reduction is enabled, the captured desktop bitmap data will be converted to 8-bit color pixel data. Color reduction usually causes loss of data quality as fewer colors will be displayed on playback.

The advantage of color reduction is that it results in small packets and uses less network bandwidth and less disk space to store the screen capture files.

Color reduction is more suitable when the agents are using Notepad, Word and Outlook kind of applications, since these applications produce less color data.

**ScreenChangeDetectionInterval**

The ScreenChangeDetectionInterval defines how often (in msec) the capture will check for screen changes. The setting range is 25 - 500.

The default value is 150; the suggested value is 50.

Lowering the value increases the capture quality, but also increases the amount of CPU used by capture.

**NOTE**

1. The compression ratio may vary depending on the screen bitmaps being compressed.
2. Compression methods providing better compression ratio usually use more CPU.
3. JPEG compression provides the best compression when capturing pictures, but it may cause loss of quality in the images when the recording is played back.
Registry Values for Terminal Services Support

The registry values for Terminal Services Screen Capture support are located in:

HKLM\SOFTWARE\Witness Systems\eQuality Agent\Capture\CurrentVersion

The following additional registry values are applicable only when Screen Capture Module Service is running on Terminal Services Server.

<table>
<thead>
<tr>
<th>Registry Entry</th>
<th>Description</th>
<th>Type</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>WitnessServerList</td>
<td>Comma-separated list of the QM BDR server names to be serviced by the Capture Service on the Terminal Services servers.</td>
<td>REG_SZ</td>
<td>Blank</td>
</tr>
<tr>
<td>TermSvr</td>
<td>Used to indicate thin-client server: 0 - Not Terminal Server 1 - Terminal Server</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td>UseAgentID</td>
<td>Used by the Capture Service for Terminal Services servers to determine whether device host names or agent logon IDs are used to locate thin-client sessions: 0 - Device Host Name 1 - Agent Logon ID</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td>ServiceSocketListenPort</td>
<td>Capture service socket port for listening for recorder server connections in Terminal Services environments. Typically 4002.</td>
<td>REG_DWORD</td>
<td>4002</td>
</tr>
</tbody>
</table>

AIM Registry Values

The AIM registry keys are located in:

HKLM\SOFTWARE\Witness Systems\AIM

Agent Initiated Monitoring uses the following registry values.

<table>
<thead>
<tr>
<th>Registry Entry</th>
<th>Description</th>
<th>Type</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnableAnnotation</td>
<td>Enables the Annotate option in the AIMTray menu.</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td>Client_AdapterURL</td>
<td><strong>Applicable only in QM environments.</strong> QM BDR Server name and port number separated by a colon (:) to which AIM event messages are sent. Clear this setting value for Recorder server environments.</td>
<td>REG_SZ</td>
<td>“”</td>
</tr>
</tbody>
</table>
### Appendix A - Working with the Screen Capture Module

**Screen Capture and AIM Registry Settings**

#### Registry Entry

<table>
<thead>
<tr>
<th>Registry Entry</th>
<th>Description</th>
<th>Type</th>
<th>Default Value</th>
</tr>
</thead>
</table>
| Client_Trace       | **Applicable only in QM environments.** Used for debug purposes only. When this setting is enabled, AIM displays the event message that is being sent to BDR Server in the message box.  
1 - Enable  
0 - Disable | REG_DWORD          | 0          |
| LockAgentID        | **Applicable only in QM environments.** When this setting is set to 1, AIM disables the Agent ID field from editing in the AIM Login dialog box.  
1 - Disable  
0 - Enable | REG_DWORD          | 0          |
| LockExtension      | **Applicable only in QM environments.** When this setting is set to 1, AIM disables the Agent Extension field from editing in the AIM Login dialog box.  
1 - Disable  
0 - Enable | REG_DWORD          | 0          |
| LogonLogoff        | **Applicable only in QM environments.** Set to 1 to display the Logon/Logoff Agent options in AIMTray menu.  
1 - Display  
0 - Hide | REG_DWORD          | 0          |
| StartMonitoring    | Set this value to 1 to display the Start Monitoring option in AIMTray menu.  
1 - Display  
0 - Hide | REG_DWORD          | 1          |
| StartStopBehavior  | Specifies events that are sent for Start Monitoring and Stop Monitoring commands: | REG_DWORD          | 0          |
| Value              | Start Monitoring events | Stop Monitoring events |
| 0                  | StartRecord             | StopRecord   |
| 1                  | Connected               | Disconnected |
| 2                  | Connected, StartRecord  | StopRecord, Disconnected |

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**Impact 360 Desktop Applications Deployment Reference and Installation Guide**

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## Appendix A - Working with the Screen Capture Module

### Screen Capture and AIM Registry Settings

**StartStopContentType**
- Specifies media type for Start and Stop Monitoring commands:
  - AudioVideo - audio and screens
  - Audio - audio only
  - Video - screens only

**StopMonitoring**
- Set this value to 1 to display the Stop Monitoring option in AIMTray menu.
  - 1 - Display
  - 0 - Hide

**Client_UseStub**
- **Applicable only in QM environments.**
  - Used for Debug purpose only. AIM drops the messages when it is set to 1 (messages will not reach BDR Server).

**Client_ReturnFailure**
- **Applicable only in QM environments.**
  - Used for debug purposes only. When set to 1 it tracks the success or failure of the messages sent to the BDR Server.
  - 1 - Enable
  - 0 - Disable

**Client_AutoReconnect**
- **Applicable only in QM environments.**
  - Used for Debug purposes only. Configures AIM to auto reconnect if the connection to the BDR Server is broken.
  - 1 - Reconnect
  - 0 - Do not reconnect

**BlockMonitoring**
- Set this value to 1 to display the Block Monitoring option in the AIMTray menu.
  - 1 - Display
  - 0 - Hide

**UserFieldName1**
- Specifies the User Field 1 custom attribute name.

**UserFieldName2**
- Specifies the User Field 2 custom attribute name.

**UserFieldName3**
- Specifies the User Field 3 custom attribute name.

**UserFieldName4**
- Specifies the User Field 4 custom attribute name.

<table>
<thead>
<tr>
<th>Registry Entry</th>
<th>Description</th>
<th>Type</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>StartStopContentType</td>
<td>Specifies media type for Start and Stop Monitoring commands:</td>
<td>REG_SZ</td>
<td>AudioVideo</td>
</tr>
<tr>
<td></td>
<td>AudioVideo - audio and screens</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Audio - audio only</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Video - screens only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>StopMonitoring</td>
<td>Set this value to 1 to display the Stop Monitoring option in AIMTray menu.</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1 - Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - Hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client_UseStub</td>
<td><strong>Applicable only in QM environments.</strong></td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Used for Debug purpose only. AIM drops the messages when it is set to 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(messages will not reach BDR Server).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client_ReturnFailure</td>
<td><strong>Applicable only in QM environments.</strong></td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Used for debug purposes only. When set to 1 it tracks the success or failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the messages sent to the BDR Server.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Enable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - Disable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client_AutoReconnect</td>
<td><strong>Applicable only in QM environments.</strong></td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Used for Debug purposes only. Configures AIM to auto reconnect if the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>connection to the BDR Server is broken.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Reconnect</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - Do not reconnect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BlockMonitoring</td>
<td>Set this value to 1 to display the Block Monitoring option in the AIMTray</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>menu.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - Hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UserFieldName1</td>
<td>Specifies the User Field 1 custom attribute name.</td>
<td>REG_SZ</td>
<td>Contact. AIM.Use r1</td>
</tr>
<tr>
<td>UserFieldName2</td>
<td>Specifies the User Field 2 custom attribute name.</td>
<td>REG_SZ</td>
<td>Contact. AIM.Use r2</td>
</tr>
<tr>
<td>UserFieldName3</td>
<td>Specifies the User Field 3 custom attribute name.</td>
<td>REG_SZ</td>
<td>Contact. AIM.Use r3</td>
</tr>
<tr>
<td>UserFieldName4</td>
<td>Specifies the User Field 4 custom attribute name.</td>
<td>REG_SZ</td>
<td>Contact. AIM.Use r4</td>
</tr>
<tr>
<td>Registry Entry</td>
<td>Description</td>
<td>Type</td>
<td>Default Value</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>UserFieldName5</td>
<td>Specifies the User Field 5 custom attribute name.</td>
<td>REG_SZ</td>
<td>Contact. AIM.Use r5</td>
</tr>
<tr>
<td>UserField1</td>
<td>Specifies the User Field 1 label name in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>UserField2</td>
<td>Specifies the User Field 2 label name in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>UserField3</td>
<td>Specifies the User Field 3 label name in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>UserField4</td>
<td>Specifies the User Field 4 label name in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>UserField5</td>
<td>Specifies the User Field 5 label name in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>UserTip1</td>
<td>Specifies the text that appears for the User Field 1 tooltip in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>This is user field 1</td>
</tr>
<tr>
<td>UserTip2</td>
<td>Specifies the text that appears for the User Field 2 tooltip in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>This is user field 2</td>
</tr>
<tr>
<td>UserTip3</td>
<td>Specifies the text that appears for the User Field 3 tooltip in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>This is user field 3</td>
</tr>
<tr>
<td>UserTip4</td>
<td>Specifies the text that appears for the User Field 4 tooltip in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>This is user field 4</td>
</tr>
<tr>
<td>UserTip5</td>
<td>Specifies the text that appears for the User Field 5 tooltip in the Annotation dialog box.</td>
<td>REG_SZ</td>
<td>This is user field 5</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName1</td>
<td>Specifies the field name that is tagged in Start Monitoring command.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName2</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName3</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName4</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName5</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>Registry Entry</td>
<td>Description</td>
<td>Type</td>
<td>Default Value</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName1</td>
<td>Specifies the field name that is tagged in Stop Monitoring command.</td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName2</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName3</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName4</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName5</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationFieldName1</td>
<td>Specifies the field name that is tagged in Block Recording command.</td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationFieldName2</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationFieldName3</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationFieldName4</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationFieldName5</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationFieldName1</td>
<td>Specifies the field name that is tagged in Pause Recording command.</td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationFieldName2</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationFieldName3</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationFieldName4</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationFieldName5</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>Registry Entry</td>
<td>Description</td>
<td>Type</td>
<td>Default Value</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>ResumeRecordingAnnotationFieldName1</td>
<td>Specifies the field name that is tagged in Resume Recording command.</td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>ResumeRecordingAnnotationFieldName2</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>ResumeRecordingAnnotationFieldName3</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>ResumeRecordingAnnotationFieldName4</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>ResumeRecordingAnnotationFieldName5</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName1</td>
<td>Specifies the field value that is tagged in Start Monitoring command.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName2</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName3</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName4</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StartMonitoringAnnotationFieldName5</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName1</td>
<td>Specifies the field value that is tagged in Stop Monitoring command.</td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName2</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName3</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName4</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>StopMonitoringAnnotationFieldName5</td>
<td></td>
<td>REG_SZ</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>Registry Entry</td>
<td>Description</td>
<td>Type</td>
<td>Default Value</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>BlockRecordingAnnotationField Value1</td>
<td>Specifies the field value that is tagged in Block Recording command.</td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationField Value2</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationField Value3</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationField Value4</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>BlockRecordingAnnotationField Value5</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationField Value1</td>
<td>Specifies the field value that is tagged in Pause Recording command.</td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationField Value2</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationField Value3</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationField Value4</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>PauseRecordingAnnotationField Value5</td>
<td></td>
<td>REG_SZ</td>
<td></td>
</tr>
<tr>
<td>ResumeRecordingAnnotationField Value1</td>
<td>Specifies the field value that is tagged in Resume Recording command.</td>
<td>REG_SZ</td>
<td>“”</td>
</tr>
<tr>
<td>ResumeRecordingAnnotationField Value2</td>
<td></td>
<td>REG_SZ</td>
<td>“”</td>
</tr>
<tr>
<td>ResumeRecordingAnnotationField Value3</td>
<td></td>
<td>REG_SZ</td>
<td>“”</td>
</tr>
<tr>
<td>ResumeRecordingAnnotationField Value4</td>
<td></td>
<td>REG_SZ</td>
<td>“”</td>
</tr>
<tr>
<td>ResumeRecordingAnnotationField Value5</td>
<td></td>
<td>REG_SZ</td>
<td>“”</td>
</tr>
<tr>
<td>EnableAnnotation Cleaning</td>
<td>Set to 1 to clear the Annotation field values every time the annotation dialog is opened. If it is set to 0, then AIM preserves the Annotation field values from the last time they were specified.</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
</tbody>
</table>
### Appendix A - Working with the Screen Capture Module

**Screen Capture and AIM Registry Settings**

<table>
<thead>
<tr>
<th>Registry Entry</th>
<th>Description</th>
<th>Type</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ShowIcon</td>
<td>Set it to 1 to display the AIMTray icon on the task bar.</td>
<td>REG_DWORD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Set it to 0 if needed only in QM environments where AIM can be configured</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>to send automated login/logoff messages to BDR Server.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For Recorder server environments, always set it to 1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ScreenOnlyWorkspace</td>
<td><strong>Applicable only in QM environments.</strong> Set to 1 to allow anonymous login</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>to a workspace without a telephone. When this option is selected, AIM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>sends a login event to the BDR Server when the session is opened and a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>logoff event when the session is closed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HideExitMenuItem</td>
<td>Set this value to 1 to hide the Exit option in the AIMTray menu.</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 - Hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AgentID</td>
<td><strong>Applicable only in QM environments.</strong> Specifies the Agent ID to use in</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>AIM messages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension</td>
<td><strong>Applicable only in QM environments.</strong> Specifies the Extension value to</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>use in AIM messages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HideLogonMenuItem</td>
<td><strong>Applicable only in QM environments.</strong> Set this value to 1 to hide the</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Logon Agent option in the AIMTray menu.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - Display</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HideLogoffMenuItem</td>
<td><strong>Applicable only in QM environments.</strong> Set this value to 1 to hide the</td>
<td>REG_DWORD</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Logoff Agent option in the AIMTray menu.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 - Hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 - Display</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Configurations Needed to Support AIM Call Annotation

You can enable Agent Initiated Monitoring (AIM) during the Screen Capture Module installation. If you enable AIM, you must also perform additional configurations to ensure that agents can annotate calls from AIM.

Read this section to understand all configurations required to enable agents to annotate calls from Agent Initiated Monitoring (AIM). These configurations are discussed in the following topics:

- Configure AIM to Support Annotations, page 124
- Configure Custom Attributes in Enterprise Manager, page 126
- Enable Custom Data Fields and Mapping Attributes, page 127
- Verify the Configuration is Working, page 128

Configure AIM to Support Annotations

Configuring AIM to support annotations is the first of four procedures associated with ensuring that agents can annotate calls with AIM.

This procedure should be performed during the Screen Capture Module installation. If it is not performed during the Screen Capture Module installation, it can also be accomplished by altering the Screen Capture Module registry settings after the product is installed.

To configure AIM to support annotations during the product installation, be sure to make the following configurations during the Screen Capture Module installation:

1. Complete the following settings on the Integration Services Options installation screen:
   a. Select the Connect to Integration Services option.
b. In the **Connect Adapter URL** `<hostname:port>` field, you must specify the hostname and port of the server that hosts the Integration Service server role. This configuration is required to connect to the Integration Service to send logon/logoff and other AIM messages to the Integration Service.

2 On the **AIM Annotation Setup** installation screen, complete the **User Field X** settings (**User Field 1**, **User Field 2**, **User Field 3**, **User Field 4**, and **User Field 5**).

The values you enter in these fields will appear to the agent in the user interface when the agent annotates the call. In this example, assume that you make these entries in the five User Field settings:
- Customer Name
- Address
- Phone
- Issue
- Notes

**NOTE** For complete installation instructions, see “Screen Capture and AIM” on page 73.

Alternately, if you did not configure the **User Field X** settings during the Screen Capture Module installation, or if you configured them incorrectly, you can configure them from the registry editor after the Screen Capture Module is installed.

To configure these settings from the registry editor:

1 Start the registry editor on the computer on which the Screen Capture Module is installed (**Start > Run** and type `regedit`).

2 Open `HKLM\SOFTWARE\Witness Systems\AIM`.

3 Enter values for the following registry keys. The values you enter for each of these registry keys will appear to the agent in the user interface when the agent uses AIM to annotate the call:
   - **UserField1**
   - **UserField2**
   - **UserField3**
   - **UserField4**
   - **UserField5**

4 Restart the AIM application.
   - Right click the AIM icon in the system tray and click **Exit**.
   - Run the `AimTray.exe` file (located in the directory in which the Screen Capture Module is installed).

**Next procedure:**

Configure Custom Attributes in Enterprise Manager, **page 126**
Configure Custom Attributes in Enterprise Manager

 Configuring custom attributes in the Enterprise Manager application is the second of four procedures associated with ensuring that agents can annotate calls with AIM.

After you have provided values for the User Field X settings, as described in “Configure AIM to Support Annotations” on page 124, you must create custom attributes for each of the user fields.

The names of these custom attributes must exactly match the names that are specified for the UserFieldNameX registry keys on the computer that hosts the Screen Capture Module application.

It is recommended that you create custom attribute names that match the default names provided for the UserFieldNameX registry keys, as discussed in the procedure below.

1 The default values for each of the five UserFieldNameX registry keys are shown below:

<table>
<thead>
<tr>
<th>Registry Key</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UserFieldName1</td>
<td>Contact.AIM.User1</td>
</tr>
<tr>
<td>UserFieldName2</td>
<td>Contact.AIM.User2</td>
</tr>
<tr>
<td>UserFieldName3</td>
<td>Contact.AIM.User3</td>
</tr>
<tr>
<td>UserFieldName4</td>
<td>Contact.AIM.User4</td>
</tr>
<tr>
<td>UserFieldName5</td>
<td>Contact.AIM.User5</td>
</tr>
</tbody>
</table>

NOTE To view these registry keys and their current settings, run the registry editor on the computer on which the Screen Capture/AIM application is installed. Navigate to HKLM\SOFTWARE\Witness Systems\AIM to view the registry keys.

2 Create custom attributes with names that exactly match the values associated with the UserFieldNameX registry entries.

   a. In the Enterprise Portal application, select System Management > Custom Data > Attributes.

   b. Click the Create button (in the bottom right corner).

   c. In the Name field, type the name that matches the value associated with registry key UserFieldName1 (in this example, type Contact.AIM.User1). You can accept the remaining default entries on the New Attribute screen, or alter them as needed.

   d. Click the Save button.

   e. Repeat steps b., c., and d., to create four more default custom attributes with names that match the values of the UserFieldName2 through UserFieldName5 registry keys.

When you are finished, the following five attributes should display under the Custom heading at the bottom of the Available Attributes screen
Appendix A - Working with the Screen Capture Module

Configurations Needed to Support AIM Call Annotation

- Contact.AIM.User1
- Contact.AIM.User2
- Contact.AIM.User3
- Contact.AIM.User4
- Contact.AIM.User5

Next procedure:
Enable Custom Data Fields and Mapping Attributes, page 127

Enable Custom Data Fields and Mapping Attributes

Enabling Custom Data fields for the Central Contact database and mapping attributes to the Custom Data fields is the third of four procedures associated with ensuring that agents can annotate calls with AIM.

After you have configured attributes in the Enterprise Manager, as described in “Configure Custom Attributes in Enterprise Manager” on page 126, you must enable five Custom Data fields and then map the attributes to those Data Fields. Follow the procedure below:

1. In the Enterprise Portal application, select Organization Management > Recording, Quality Monitoring, and Analytics > Custom Data.
2. Enable five Custom Data fields, one for each custom attribute that you configured in “Configure Custom Attributes in Enterprise Manager” on page 126. You can enable any five Custom Data fields that are not currently enabled. In this example, we will enable Custom Data fields 1 through 5.
   a. Select the icon in the Edit column for Custom Data 1, and then select the Enabled option to enable the Custom Data 1 field.
   b. Repeat step a. to enable the fields Custom Data 2 through Custom Data 5.

NOTE: You can enable any five of the 25 available Custom Data fields. It is not mandatory to enable the Custom Data 1 through 5 fields.

At this point, you have enabled the Custom Data fields. Next, you must map attributes to the Custom Data fields you have just enabled.

3. In the Enterprise Portal application, select System Management > Custom Data > Custom Data.
   Each Custom Data field that you enabled displays in the Custom Data screen. For example, if you enabled Custom Data fields 1 through 5, you will see CDF1, CDF2, CDF3, CDF4, and CDF5 displayed.
4. In the Attribute Mapping column, map each of the 5 CDFs to one of the Custom Attributes that you created in “Configure Custom Attributes in Enterprise Manager” on page 126. For example:
   - For CDF1, in the Attribute Mapping column select Contact.AIM.User1.
   - For CDF2, in the Attribute Mapping column select Contact.AIM.User2.
Appendix A - Working with the Screen Capture Module

Configurations Needed to Support AIM Call Annotation

- For CDF3, in the **Attribute Mapping** column select Contact.AIM.User3.
- For CDF4, in the **Attribute Mapping** column select Contact.AIM.User4.
- For CDF5, in the **Attribute Mapping** column select Contact.AIM.User5.

### Verify the Configuration is Working

Verifying the configuration is working is the last of four procedures associated with ensuring that agents can annotate calls with AIM.

After performing the three previous procedures, annotate a call to verify the configuration is working.

To annotate a call:

1. On the computer where the Screen Capture Module is installed, use the AIM feature to start the audio or the audio and screen recording. (Make sure the computer where AIM is running is part of the workspace.)

2. When annotating a call from AIM, verify that the **Annotate Call** dialog displays the values that you specified for User Fields 1 through 5 in the procedure “Configure AIM to Support Annotations” on page 124. In this example, those values included:
   - Customer Name
   - Address
   - Phone
   - Issue
   - Notes

3. In the **Annotate Call** dialog, enter an annotation for each of the five fields listed in the previous step and then click the **OK** button to send the annotation tagging.

4. Stop the call.

5. In the Portal, open the contact and verify that the Custom Data fields display the same values that you entered for each of the five fields in step 3.
   
   If the Custom Data fields display the same values you entered in the five fields in step 3, the AIM call annotation feature is working correctly.

### Troubleshooting the Configuration

You can use the Integration Service log and the audio call XML file as troubleshooting tools if the AIM annotation feature is not working correctly.

In the Integration Service log, locate the IEMessage that contains the attributes of the AIM annotation message, and examine the attributes for errors.

In the audio call XML file, examine the `<tag>` attribute associated with the call annotation for possible errors.
Enabling Multi-Monitor Screen Capture Support

Screen Capture Module can record screens from multiple monitors attached to a workstation.

Recording multiple monitors is controlled by the DWORD registry setting `DualMonitor`, which resides at: `HKEY_LOCAL_MACHINE\SOFTWARE\Witness Systems\eQuality Agent\Capture\CurrentVersion`.

If `DualMonitor` is set to 1, Screen Capture Module records video from all attached monitors. There can be more than two monitors attached to a workstation. By default, `DualMonitor` is set to 1.

If `DualMonitor` is set to 0, Screen Capture Module only records video from the designated primary monitor screen.

Set the appropriate value for `DualMonitor` as needed.

- Capturing video from multiple monitors increases the network bandwidth utilization.
- Monitors can have different resolutions. Recorded screen width will equal the sum of all monitor widths. Recorded screen height will equal the maximum height from all monitor heights.

**NOTE** Screen capture of multiple monitors is tested in the following configuration:

- Multiple monitors are attached to a single display adapter
- Multiple monitors are configured by selecting the **Extend my Windows desktop onto this monitor** option in the Windows Display Properties dialog box.

If the monitors are attached to more than one display adapter then the behavior is unknown. In general, Screen Capture Module will capture all the monitors in sequence displayed in the Display Properties dialog.
Known Issues

This section discusses Screen Capture Module configuration notes and known issues. The Screen Capture Module known issues include:
Appendix A - Working with the Screen Capture Module

Known Issues

- Windows Vista Issues (Business and Enterprise Editions), page 131
- Windows Vista\Windows 7\Windows 2008 Terminal Server Issue, page 131
- Windows 7\Windows 2008 R2 Issues, page 131
- Remote Desktop Connection Issue, page 132
- Windows Media Player Capture Issue, page 132
- Conserving Bandwidth Usage and Disk Storage Space with Screen Capture, page 133
- An Upgrades Does Not Change the ColorReduction Registry Setting, page 133
- Screen Stitching within Segment Not Supported, page 134

Windows Vista Issues (Business and Enterprise Editions)

If the 'Windows Aero' color scheme is not enabled on the Agent workstation, then the Screen Capture Module may not be able to capture the Gadgets, Tooltips, and similar items displayed on the desktop.

This issue occurs only when the Screen Capture Module is installed on Windows Vista SP2 Business and Enterprise editions.

Windows Vista\Windows 7\Windows 2008 Terminal Server Issue

The following issue occurs when the Screen Capture Module is installed on the Windows Vista, Windows 7, and Windows 2008 Terminal Server Operating Systems.

The LogManager.exe file must run as an administrator or it will display an empty list of components. This problem occurs even when the LogManager.exe runs under an Administrator account.

To fix this problem, do either of the following:

- Run the Logger as Administrator:
  a. In Windows Explorer, navigate to the \Program Files\Witness Systems\Screen Capture Module directory.
  b. Hover over the LogManager.exe and select Run as Administrator from the right-click menu.
- Using regedit32, give the user account that runs LogManager.exe full access to the HKLM\SOFTWARE\Witness\Tracing registry key.

Windows 7\Windows 2008 R2 Issues

The following issues occur when the Screen Capture Module is installed on the Windows 7 or Windows 2008 R2 Operating System, and the Windows User Account Control (UAC) settings are enabled:
• The LogManager.exe file must run as Administrator if you want to change the log settings. See “Windows Vista\Windows 7\Windows 2008 Terminal Server Issue” on page 131 for instructions on running LogManager.exe as Administrator.

• If programs (such as captureService.exe or wcapw32.exe) have problems generating log files, you must provide the logged in user with the permissions needed to create files in the folder where the log files are stored (this folder is specified during the Screen Capture Module installation).

If the UAC settings are disabled in the operating system, neither of the issues above will occur. One way to disable the UAC settings is described below:

1 Open the User Account Control settings using one of these methods:
   • Start Menu > Control Panel > User Accounts and Family Safety > User Account
   • Start Menu > Control Panel > System and Security > Action Center

2 Click or right-click on the Flag icon in the notification area (system tray), and select Open Action Center.

3 Type MsConfig in Start Search to start System Configuration.

4 Select the Tools tab, select Change UAC Settings, and then click the Launch button.

5 Select Change User Account Control settings.

6 Slide the slide bar down to the lowest value so that it is positioned at the Never notify setting.

7 Click OK.

8 Restart the computer to disable the User Access Control settings.

Remote Desktop Connection Issue

If a Remote Desktop session is being recorded, and the user minimizes the Remote Desktop window to the taskbar, a black screen is recorded.

For example, a black screen is recorded in the following scenario:

1 The user accesses an application over a Remote Desktop Connection.
2 The Screen Capture Module begins recording the session.
3 The user minimizes the Remote Desktop Connection window to the taskbar.

Windows Media Player Capture Issue

The Screen Capture Module cannot capture movie files (such as .mpeg or .avi files) played in Windows Media Player when the Use overlays option is selected in the Video Acceleration settings of Media Player.

If the Use overlays option is selected, a black screen appears inside the Windows Media Player application when the screen is captured (and the screen recording is played back).

To prevent this problem, disable the Use overlays option in Windows Media Player:
Open Windows Media Player.
Select Tools > Options.
Select the Performance tab.
Click the Advanced... button.
In the Video Acceleration section, clear the check mark from the Use overlays setting.
Click OK in the Video Acceleration Settings window.
Click Apply and then click OK in the Options window.
Click OK in the Video Acceleration Settings window.
Click Apply and then click OK in the Options window.

Conserving Bandwidth Usage and Disk Storage Space with Screen Capture

When the Screen Capture application captures screen data, the captured screen data is both transmitted on the network to the screen recorder and then archived in files on a storage server.

You can reduce the network bandwidth consumed by the transmission of screen image data on the network, and also reduce the disk space required to store the screen recordings, by adjusting the Display settings of the computer on which the screen capture is performed, as noted below:

- Use lower Display resolution settings
- Use simple Background images on the desktops

High resolution settings and complex background images cause more data to be created during the capture process, and result in more data being transmitted on the network and saved to disk.

An Upgrades Does Not Change the ColorReduction Registry Setting

New installations of the Screen Capture Module set the ColorReduction value to 1. However, upgrade installations of the Screen Capture Module will keep the existing ColorReduction value.

System Administrators can change the ColorReduction setting in the registry by opening the registry editor and navigating to the following parameter:

HKEY_LOCAL_MACHINE\SOFTWARE\Witness Systems\eQuality Agent\Capture\CurrentVersion: ColorReduction
Screen Stitching within Segment Not Supported

Stitching of multiple screen recordings within a segment is not supported. During playback of the recorded segment, only the first screen recording is played back.

For example, when a customer uses the START/STOP commands to control recording for PCI compliance audio and screen recordings are segmented. If the agent presses START, STOP, START during a call, the result is two (2) audio and two (2) screen recording segments. In this case the system stitches the audio and concatenates them into one audio segment, however the two screen recordings are not stitched. During playback this results in the audio playing back seamlessly, while only the first screen recording is played back.

**Workaround**

In this scenario, the customer should be advised to use PAUSE/RESUME commands. This prevents the screen segmentation and during playback the full screen recording is displayed.
CapTestB Utility

The CapTestB Utility is typically installed on an IT Administrator workstation for testing the performance of the screen capture application installed on the Agent Workstation for Recording.

This chapter includes:

- **Introducing the CapTestB Utility**, page 135
- **Running the CapTestB Utility**, page 136
- **Analyzing Performance**, page 139

**Introducing the CapTestB Utility**

CapTestB is a test utility used with the Screen Capture Module. CapTestB allows you to view screen activity from a remote agent session and gather valuable performance measurements.

You can use this utility to test connectivity, gauge network performance, and to test image quality provided by the agent capture software. You can then further analyze the information gathered to determine the best possible configuration settings for agent capture in your particular environment.

The “Agent Override” option allows you to upload test configuration settings to the agent capture software and view performance differences without ever having to alter the agent's machine. These overrides take effect for the duration of the test monitor and then revert to the local settings.

Measurements are recorded to file every minute, and the file can be saved at the end of the test session to retain for further analysis.

**CapTestB Security**

CapTestB has a built-in security feature to prevent unauthorized usage. Whenever a test monitor is attempted, a pop-up dialog appears on the agent’s workstation alerting the agent that a test monitor is about to take place. The message text displayed indicates the workstation that is attempting to perform the test. This feature was added to eliminate privacy concerns within your organization. It can be disabled with the help of customer support.

**CapTestB System Requirements**

CapTestB is supported on the following operating systems:
Running the CapTestB Utility

1. Copy the **Captest.zip** file to a machine that is not an Agent Desktop installed with the Screen Capture module.
2. Extract the files to a local folder.
3. Run the utility by double-clicking **captest.exe**.
   
   If it fails to run, install the **vcredist_x86.exe** application file that was included in the Captest.zip and then run **captest.exe** again.

The CapTestB Utility opens to the main window. The CapTestB main window contains a control bar (left frame), statistics grid (lower frame) and playback window for viewing screen captures.
4 Configure the control bar with test parameters and agent workstation parameters. See Control Bar, page 138

5 Select File > Start Monitor or click the Start button on the toolbar.

   In most configurations, an alert appears on the workstation informing the user that the utility is attempting to monitor the workstation. Click OK.


6 Analyze screen capture performance. The performance statistics are color coded to reflect threshold and danger levels. See Analyzing Performance, page 139

7 Delete the Captest.zip and the extracted files after use.
Control Bar

The Control Bar is used to input CaptestB configuration parameters and Agent Workstation Screen Capture configuration parameters.

**CapTestB Configuration Parameters:**

- **Host Name:** host name of the agent's PC or the host name of a thin-client server.
- **TCP Port:** TCP connection port number. 4001 for workstations and 4002 for thin-client servers.
- **Thin-Client ID:** the host name of a thin-client device if using host ID mode, or the Agent's Windows NT logon ID if using agent ID mode. Leave empty for PC monitoring.
- **Poll Rate:** Rate (in milliseconds) to poll for changes.
- **Key-Frame Rate:** Rate (in milliseconds) to poll for key-frames.
- **Scale:** Select to scale image display to fit within the playback window.
- **Single Frame:** Select to display each delta frame individually.
- **Override Agent:** Select to use agent overrides for the next test session.
- **Data Encryption:** Select if captured screen files are encrypted.
- **Color Reduction:** Select to reduce captured color to 8-bit (256 colors).

**Agent Workstation Screen Capture Parameters:**

- **Agent Capture Version:**
- **Capture Method:** Desired detection method: 1=Enhanced, 2=Standard.
- **Capture Quality:** Desired capture quality setting from 1 to 10.
- **Compression:** Desired compression method: 1=Witness Enhanced, 2=Witness Standard, 3=MSRLE8, 4=JPEG, 5=5.x Compatibility, 6=6.3 Compatibility, 7=dynamic
- **Compression Quality:** Desired compression quality setting from 1 to 10.
Statistics Grid

The following performance statistics are reported in the statistics grid:

- **Total Polls**: the total number of polls sent by CapTestB to the agent.
- **Elapsed Time**: the total amount of time since the beginning of this monitor session.
- **Color Depth**: the color depth of the agent's session.
- **Resolution**: the screen resolution of the agent's session.
- **Local Queue**: the size of the receive queue on the local machine.
- **Avg/Peak Pkts/Sec**: the average and the peak number of packets received from agent capture per second.
- **Avg/Peak MB/Min**: the average and the peak mega-bytes received from agent capture per minute.
- **Curr/Avg/Peak Rem CPU**: the current, average, and peak CPU usage by WCapW32.exe on the agent's machine.
- **Curr/Avg Rem Mem**: the current and the average memory usage by WCapW32.exe on the agent's machine.
- **CRatio/Avg CRatio**: the compression ratio and the average compression ratio of the compressed image size to the uncompressed image size.
- **Capture Time (ms)**: the amount of time in milliseconds required to capture sample image data from the agent's screen.
- **Format Time (ms)**: the amount of time in milliseconds required to format the captured data for transmission.
- **Transmit Time (ms)**: the amount of time in milliseconds required to transmit a packet from the agent's machine to CapTestB.
- **Screen Time (ms)**: the amount of time in milliseconds required to capture the entire screen.
- **Cap Method**: the Detection Method currently in-use on the agent's machine.
- **Clr Red/DirectX**: indicates whether color reduction or DirectX capture is enabled on the remote workstation.
- **Capture Quality**: indicates the capture quality setting on the remote workstation.
- **Compression**: the compression method currently in-use on the agent's machine.
- **Multi-Pkt**: indicates whether multi-packet is enabled on the remote workstation.
- **MTU**: the setting for maximum transmission unit currently in-use on the agent's machine.

Analyzing Performance

Performance analysis involves gathering statistics for different configuration sets and selecting the most optimal settings for the given environment. There are typically three objectives to choose from:
- Agent impact
- Recording quality
- Journal-file size.

The choices you make will favor one of these. For this reason, it is important for you to have a clear understanding of your objectives and trade-offs in order to make an informed choice.

Several of the statistics have been assigned warning and danger threshold values. If measurements exceed these thresholds, the background color of the grid cell will be changed to yellow or red. The statistics and their threshold values are listed in the table below.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Warning</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Queue Size</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Average Packets Per Sec.</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Average Packet Size</td>
<td>20,000 bytes</td>
<td>30,000 bytes</td>
</tr>
<tr>
<td>Average MB Per Min.</td>
<td>10 MB</td>
<td>15 MB</td>
</tr>
<tr>
<td>Remote CPU</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Remote Memory</td>
<td>10,000 KB</td>
<td>15,000 KB</td>
</tr>
<tr>
<td>Capture Time</td>
<td>20 ms</td>
<td>30 ms</td>
</tr>
<tr>
<td>Format Time</td>
<td>20 ms</td>
<td>30 ms</td>
</tr>
<tr>
<td>Transmit Time</td>
<td>200 ms</td>
<td>300 ms</td>
</tr>
<tr>
<td>Screen Time</td>
<td>1000 ms</td>
<td>1500 ms</td>
</tr>
</tbody>
</table>

No matter what your objective, you must strive to stay below warning thresholds. In extreme cases, this may not be possible, and you may have to sacrifice performance. In any case, a careful analysis of statistics gathered will help you determine the most optimal settings as well as problem areas within the recording environment.
Appendix B

Media Encoder

- Media Encoder, page 142
- Installation Prerequisites, page 142
- Installing the Media Encoder, page 142
- Converting Audio Files, page 142
Media Encoder

Using the Media Encoder, it is possible to convert audio files to a PCM-encoded .wav format for machines inside or outside the organization that are not installed with the Playback application and/or cannot access the Portal.

Installation Prerequisites

Microsoft .NET Framework 2.0 or higher is required.

Installing the Media Encoder

- Install Playback. Installing Playback automatically installs the Media Encoder. See “Playback” on page 63.

The Media Encoder is installed in this location: C:\Program Files\<Company Name>\Playback\CommandLineConvertor

Converting Audio Files

You can convert audio files to the PCM-encoded .wav format either from command line or by adding a right-click menu convert option. This allows the user to download audio files recorded by the system locally, right-click the file to convert it to a media file, and send it to machine that does not have Playback or the proprietary compressed codec installed.

NOTE

The Media Encoder does not support the conversion of encrypted files.

- Enabling the Convert Option, page 142
- Disabling the Convert Option, page 143
- Converting from the Command Line, page 143

Enabling the Convert Option

This is relevant for machines running Windows Operating Systems only.

1. Open a text editor (e.g. Notepad) and create a new text file.
2. Copy the following text into the text file:

   Windows Registry Editor Version 5.00
   [HKEY_CLASSES_ROOT\SoundRec\shell\&Verint_convert]
Appendix B - Media Encoder Converting Audio Files

If Playback is installed at a different location on your computer, change the path to the CommandLineConvertor.exe file.

4. Save the text file with a .reg extension and close the file.

5. Open the file and click Yes to add the information to the registry shell.

6. Verify that the Verint convert option appears when you right-click an audio file.

NOTE: Verint Media Encoder does not support the conversion of encrypted files.

7. Delete the file that you created at step 4.

8. You can now download system audio files locally, right-click the file to convert it to a media file and send it to machine that does not have Playback/Verint Codec installed.

Disabling the Convert Option

To disable the convert right-click option in Windows menus:

1. Run the following command: CommandLineConvertor -UnRegShell

2. Verify that the Verint convert option does not appear in the menu when you right-click an audio file.

Converting from the Command Line

- Run the following command:
  
  cd [Path to the Media Encoder application file] CommandLineConvertor [inputFileName] [outputFileName]

  The parameters are described in following table:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path to the Media Encoder</td>
<td>C:\Program Files&lt;company name&gt;\Playback (default installation location)</td>
</tr>
<tr>
<td>application file</td>
<td></td>
</tr>
<tr>
<td>CommandLineConvertor</td>
<td>Media Encoder application file name</td>
</tr>
<tr>
<td>inputFileName</td>
<td>Full path and name of the audio file you want to convert</td>
</tr>
</tbody>
</table>
### Parameter | Description
--- | ---
outputFileName | Full path and name of the converted file. If you do not supply an output, Media Encoder creates one by adding _Conv to the source file name. For example, `input_Conv.wav`  
/? or no parameter | For help. Displays the Media Encoder application name

For Example:
```
cd C:\Program Files\<company name>\Playback CommandLineConvertor  
C:\My Media Files\originals\input.wav C:\My Media Files\converted\output.wav
```
You can now send the converted output file to machine that does not have Playback/Verint Codec installed.
Installing V11 SP1 Agent Workstations for Acquisition Recording

- [Agent Desktop Applications for Acquisition Recording](#), page 146
- [Manually Installing Agent Workstations for Acquisition Recording](#), page 147
- [Silently Distributing Agent Workstations for Acquisition Recording](#), page 154
Agent Desktop Applications for Acquisition Recording

This appendix is relevant in upgrade scenarios from ULTRA 9 or Impact 360 V10 only, and is part of a larger upgrade workflow. See “Upgrading from ULTRA 9 or Impact 360 V10” on page 91.

The Desktop Applications required on the workstations of users defined as Agents in an Acquisition Recording environment are listed in the following table:

<table>
<thead>
<tr>
<th>Agent Desktop Applications</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Record On-Demand for Acquisition Recording</strong></td>
<td>The Record On Demand desktop application enables agents to control call recordings (for example, start, stop or mute a recording), and perform data tagging directly from the agent’s desktop.</td>
</tr>
<tr>
<td><strong>Screen Capture for Acquisition Recording</strong></td>
<td>Screen Recording records agent screen activity both during the interaction between an agent and the contact center customer and for a configurable amount of wrap up time after the contact has ended. It is activated based on configurable recording rules. By default, screens are recorded only for a percentage of contacts.</td>
</tr>
<tr>
<td><strong>CTI Link Agent</strong></td>
<td>CTI Link Agent is installed on each agent desktop to provide agent identification in a free-seating environment and to provide screen recording information to the Acquisition Integration Service server role. Mapping the agent PC to a phone extension based on the agent’s network login achieves agent identification.</td>
</tr>
<tr>
<td><strong>Logger</strong></td>
<td>Installing the Logger provides the infrastructure for the Desktop Applications to generate logs. Log severity and destination defaults can be modified for troubleshooting purposes by using the Logger Manager. Logs can be viewed using the Logger Viewer.</td>
</tr>
</tbody>
</table>

The predefined Agent role does not have access to the Portal. If agents are granted access, then **Playback** is required.
Manually Installing Agent Workstations for Acquisition Recording

The following are the manual installation instructions for the agent workstations compatible with acquisition recording.

- **Installing Record on Demand**, page 147
- **Installing Screen Capture for Acquisition Recording**, page 148
- **Installing CTI Link Agent**, page 150
- **Installing Logger**, page 153

## Installing Record on Demand

The Record On-Demand desktop application is installed only when agents are required to control call recordings (for example, start, stop or mute a recording), and perform data tagging directly from the agent’s desktop.

When recording control APIs are available to perform these tasks without agent intervention, an Impact 360 SDK license is required.

1. Run the **RODInstallation.msi** file.
   The **Welcome** screen of the setup wizard appears.
2. Click **Next**.
   The **End-User License Agreement** screen appears.
3. Select **I accept the terms in the License Agreement** and click **Next**.
   The **Custom Setup** screen appears.
   To view the required space for an application, select it in the list and read the text in the pane on the right.
4. Click **Next**.
5. If a list of missing prerequisites appears, click **Close** and then click **Cancel**. Install the missing prerequisites and restart the installation.
   When there are no missing prerequisites, the **General Settings** screen appears.
6. Enter the **HTTP/HTTPS Alias** of the Application Server.
   Resolve the HTTP/HTTPS Alias alias by browsing to the Impact 360 Portal Enterprise Settings and selecting the **Consolidated or Application Server > Additional Settings > HTTP/HTTPS Alias**.
7. (Optional) Select **Use SSL for client/server communication**.
8. Click **Next**.
   The **Record-on-demand Settings** screen appears.
9 Type the **HTTP/HTTPS Alias** of the Acquisition Recorder server associated with the Acquisition Integration Service Server Role.

Resolve the HTTP/HTTPS Alias by browsing to the Impact 360 Portal Enterprise Settings and selecting the **Acquisition Recorder Server > Additional Settings > HTTP/HTTPS Alias**.

10 In the **Extension** field, type the workstation extension.

11 Type caption names for the three data fields that can be updated from the Record On Demand application.

These captions will appear in the Record On Demand application only. For other Impact 360 V11 applications, the field names are defined in the Caption Editor. These three fields are mapped to Custom Data 1, 2, and 3 respectively, unless changed during upgrade from previous versions.

12 Specify the functionality to be available in the Record On Demand application by selecting the relevant check boxes, and then click **Next**.

The **Ready to Install** window appears.

13 Click **Install**.

When the installation is complete, the **Installation Success** window appears.

14 Click **Finish** to exit the installation wizard.

The **Installer Information** message appears prompting you to restart the computer.

15 Restart your computer.

**Language Settings**

To view the Record On-Demand application interface in a language other than English, set your regional settings for non-unicode programs to the required language.

To change the regional settings:

1 From the **Start** menu, select **Settings > Control Panel > Regional and Language Options**.

The Regional and Language Options screen is displayed.

2 In the **Advanced** tab, in the **Language** list, select the required language and click **OK**.

**Installing Screen Capture for Acquisition Recording**

Install screen capture, and then configure the recommended screen capture settings.

1 Run the **ScreenRecording.msi** file.

The **Welcome** screen of the setup wizard appears.

2 Click **Next**.

The **End-User License Agreement** screen appears.
3. Select **I accept the terms in the License Agreement** and click **Next**.
   
   The **Custom Setup** screen appears.
   
   To view the required space for an application, select it in the list and read the text in the pane on the right.

4. Click **Next**.

5. If a list of missing prerequisites appears, click **Close** and then click **Cancel**. Install the missing prerequisites and restart the installation.
   
   When there are no missing prerequisites, the **Screen Recording Settings** screen appears.

6. If required, change the default **Recording Method** and **Encoding Level** settings.

7. For operating systems (other than Windows Vista, Windows 7 and Windows 2008) that support personal firewalls, select **Open ports for screen recording**, and then click **Next**.
   
   If this check box is not selected, you will need to manually open port 5600 on the computer firewall later. On Windows Vista, Windows 7 and Windows 2008 operating systems, this port cannot be opened during the Desktop installation and needs to be opened manually.

   The **Ready to Install** window appears.

8. Click **Install**. The **Updating System** window opens.

9. Wait while the features are installed. When the installation is complete, the **Installation Success** window appears.

10. Click **Finish** to complete the installation.
    
    The **Installer Information** message appears prompting you to restart the computer.

11. Restart your computer.

12. Continue to **Acquisition Screen Capture Settings**.

**Acquisition Screen Capture Settings**

The following settings are required or recommended:

- To increase workstation performance during screen recording, it is recommended that all Acquisition Agent workstations are configured to use 16-bit color settings rather than 32-bit color settings.

- It is recommended to remove any background on the agent workstation desktops.
  
  To configure the desktop background, select **Start > Settings > Control Panel > Display > Background**.
  
  The background increases the size of the screen files and consequently, network traffic and CPU consumption is also increased.

- Adjust the mouse pointer properties as follows
  
  a. From the **Start** menu, select **Settings > Control Panel > Mouse > Pointers** tab.
b. Ensure the mouse pointer Scheme is set to **None**.
c. In Windows 2000, ensure that the **Enable Pointer Shadow** option is disabled.

### Installing CTI Link Agent

1. Run the **ILA.msi** file. The **Welcome** screen of the setup wizard appears.

2. Click **Next**. The **End-User License Agreement** screen appears.

3. Select **I accept the terms in the License Agreement** and click **Next**. The **Custom Setup** screen appears.  
   To view the required space for an application, select it in the list and read the text in the pane on the right.

4. Click **Next**. If a list of missing prerequisites appears, click **Close** and then **Cancel**. Install the missing prerequisites and restart the installation.
   When there are no missing prerequisites, the **ILA Settings** screen appears.

5. (Optional) In the **Extension (optional)** field, type a numeric phone extension for the agent. The **Extension (optional)** field is not required if you are installing in a Citrix or Network Server environment.

6. In the **CTI Link DNS/IP** field, type the **HTTP/HTTP Alias** of the server associated with the Acquisition Integration Service server role.  
   Resolve the HTTP/HTTPS Alias by browsing to the Impact 360 Portal Enterprise Settings and selecting the **Acquisition Recorder or Consolidated Server > Additional Settings > HTTP/HTTPS Alias**.
7 Select **Enable interactive agent login** if agents do not have unique PC login names and CTI does not provide agent identification, and then click **Next**.

**NOTE** If you are using Citrix Published Application mode and are installing the CTI Link Agent application, you can enable a seamless startup and log off for this application. See **Enabling Seamless Startup and Logoff for CTI Link Agent** for more information.

The **Ready to Install** window appears.

8 Click **Install**.

When the installation is complete, the **Installation Success** window appears.

9 Click **Finish** to exit the installation wizard.

The **Installer Information** message appears prompting you to restart the computer.

10 Restart your computer.

11 Continue to the following procedures if relevant:

- [Configuring CTI Link Agent to Work with Multiple Switches](#), page 151
- [Updating CTI Link IP address in the CTI Link Agent Configuration](#), page 151
- [Enabling Seamless Startup and Logoff for CTI Link Agent in a Citrix Environment](#), page 152

### Configuring CTI Link Agent to Work with Multiple Switches

When workstations require to work with multiple switches so that agents can log into more than one switch (at different times), the CTI Agent application must be able to communicate with multiple instances of CTI Link.

Note that in Citrix Server environments, all agents that log into this server will be defined with the same set of CTI Link servers.

The following application is only available after CTI Agent installation on the agent desktop.

### Updating CTI Link IP address in the CTI Link Agent Configuration

It is required to perform this procedure whenever an IP address of the Acquisition Recorder hosting CTI Link is removed, added, or modified.

1 **Log in to the workstation as a user with administrative rights.** For workstations installed with Windows Vista/7/2008 Operating Systems, elevate the UAC security in order to gain Windows administrative rights:
   a. From the **Start** menu, select **Programs > Accessories > Command Prompt**.
   b. Right-click the Command Prompt and select **Run as administrator**.

2 If prompted for the user name and password, provide administrator credentials.
3 Browse to **C:\Program Files\Verint\ILA** and double-click the **ILAUpdateILIP.exe** file. The CTI Link Server IP Update dialog box appears displaying the IP address currently configured.

4 Click **Add New IL IP**.

5 Enter the DNS and click **Save**.

Enabling Seamless Startup and Logoff for CTI Link Agent in a CItrix Environment

Customers who use the **Citrix Published Application** mode and who installed the **CTI Link Agent** application need to update their system processes to enable CTI Link Agent to seamlessly start and close.

The update includes changing registry keys and must be performed on each Citrix server after the Impact 360 Desktop installation. Follow the relevant procedure according to the installed features:

**To enable seamless startup and logoff for CTI Link Agent**

1 From the Impact 360 Installation CD, from the **Tools\Citrix** folder, open the **Citrix.zip** and copy **IlaApp.cmd** to the **%WINDIR%\system32** folder.

2 Via Notepad, open **UltraApp.cmd** and verify that the directory path points to the CTI Link Agent installation path. If not, modify the path accordingly.

3 Configure Anti-Virus not to remove IlaApp.cmd.

4 Run **IlaApp.cmd** and verify that the **ILALoginApp**, **RFBAgent.exe** and **HostedApp** processes appear in the Windows Task Manager; then end the processes.

5 From the Impact 360 Installation CD, from the **Tools\Citrix** folder, open the **Citrix.zip** and run **InstallILAforsharedapp.vbs** to update the following registry keys:
   - **HKLM\SOFTWARE\Microsoft\WindowsNT\CurrentVersion\Winlogon\App Setup**
   - **HKLM\SYSTEM\CurrentControlSet\Control\Citrix\wfshell\TWI\LogoffCheckSysModules**

   These updates add **RFBAgent.exe** and **Ilaloginapp.exe** to the list of executables that seamlessly start upon a user’s login and terminate upon logoff, thus ensuring the proper functioning of the CTI Link Agent.

6 Export the following registry key: **HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run\ILA** (for rollback purposes).

7 Delete the following registry key: **HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Run\ILA**.

8 Verify the updates as follows:
   a. On a Citrix client with no open session, run one of the published applications.
b. On the Citrix server, check the session information and verify that the `RFBAgent.exe` and `ILALoginApp`, processes appear in the Windows Task Manager.

c. From the same Citrix client session, run a second published application.

d. On the Citrix server, look at the session information and verify that the `RFBAgent.exe`, and `ILALoginApp` processes do not appear twice in the Windows Task Manager.

e. On the client side, close the second application.

f. On the Citrix server, verify that the session does not end on the Citrix server side and that CTI Link Agent and RFB continue running.

g. On the client side, close the first application and verify that the session ends on the Citrix side and CTI Link Agent and RFB stop running.

**Installing Logger**

1. Run the `LoggerInstallation.msi` file.
   
   The **Welcome** screen of the setup wizard appears.

2. Click **Next**.
   
   The **End-User License Agreement** screen appears.

3. Select **I accept the terms in the License Agreement** and click **Next**.
   
   The **Custom Setup** screen appears.

   To view the required space for an application, select it in the list and read the text in the pane on the right.

4. Click **Next**.

5. If a list of missing prerequisites appears, click **Close** and then click **Cancel**. Install the missing prerequisites and restart the installation.

   When there are no missing prerequisites, the **Ready to Install** window appears.

6. Click **Install**.

   When the installation is complete, the **Installation Success** window appears.

7. Click **Finish** to exit the installation wizard.

   The **Installer Information** message appears prompting you to restart the computer.

8. Restart your computer.
Silently Distributing Agent Workstations for Acquisition Recording

This section provides both an example script for silent distribution and a list of relevant command line parameters for the default user. Create an installation script for the workstation based on the example and modify the parameter default values as required for your specific deployment.

**IMPORTANT** Silent installation parameters are case sensitive and are required to be capitalized.

- Example Script for Agents with Acquisition Recording, page 154
- Silent Install Parameters for Agent workstations with Acquisition Recording, page 155

Example Script for Agents with Acquisition Recording

This script is an example for silently installing the following applications: Logger, Record On-Demand, Screen Capture for Acquisition Recording and CTI Link Agent.

```bash
@echo off
setlocal
REM The script uses parameters for silent reboot when reboot is required
REM Continue running the script after each reboot until each script is installed successfully
REM If installation fails, the EXIT_CODE is 1
set MSIS_DIR=\<Shared network folder:\Impact360_DesktopApplications
set VERINTFOLDER=C:\Program Files\Verint
set EXIT_CODE=0
echo Logger Installation
msiexec -i "\%MSIS_DIR\%LoggerInstallation.msi" USE_COMMAND_LINE=1 VERINTFOLDER="\%VERINTFOLDER%" /qn
IF %errorlevel% NEQ 0 ( SET /A EXIT_CODE=1 echo ---installer failed ) ELSE ( echo ---installer succeeded ) echo Record on-Demand
msiexec -i "\%MSIS_DIR\%RODInstallation.msi" USE_COMMAND_LINE=1 VERINTFOLDER="\%VERINTFOLDER%" ROD_CFM_DNS=LMAcq ROD_DATA1="First" ROD_DATA2="Second" ROD_DATA3="Third" ROD_EXTENSION=7777777 ROD_MUTE=1 ROD_ROD=1 ROD_SOD=1 /qn
IF %errorlevel% NEQ 0 ( SET /A EXIT_CODE=1 echo ---installer failed ) ELSE ( echo ---installer succeeded )
```
Silent Install Parameters for Agent workstations with Acquisition Recording

The following mandatory and configurable parameters are for the default Desktop Applications required for Agent workstations with Acquisition Recording:

- **General Install Parameters**, page 155
- **Record On Demand Silent Install Parameters**, page 156
- **Screen Capture for Acquisition Recording Silent Install Parameters**, page 157
- **CTI Link Agent Silent Install Parameters**, page 157
- **Logger Silent Install Parameters**, page 158

General Install Parameters

The following general parameters are required to be set:

<table>
<thead>
<tr>
<th><strong>General Parameters</strong></th>
<th><strong>Description and Default Values</strong></th>
</tr>
</thead>
</table>
| MSIS_DIR               | Specifies the location of shared folder defined to save the installation files.  
**Default:** `<Shared network folder>:\Impact360_DesktopApplications` |
| VERINTFOLDERt          | Specifies the installation destination.  
**Default:** `C:\Program Files\Verint` |
## Record On Demand Silent Install Parameters

The following properties determine how Record on-Demand is configured silently on the agent desktops.

<table>
<thead>
<tr>
<th>Basic Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE=1 Mandatory</td>
</tr>
<tr>
<td>ROD_CFМ_DNS</td>
<td>The DNS or IP address of the CFM (Acquisition Director) server.</td>
</tr>
<tr>
<td>ROD_DATA1</td>
<td>Custom Data CD1 field default value. Default = Empty</td>
</tr>
<tr>
<td>ROD_DATA2</td>
<td>Custom Data CD2 field default value. Default = Empty</td>
</tr>
<tr>
<td>ROD_DATA3</td>
<td>Custom Data CD3 field default value. Default = Empty</td>
</tr>
<tr>
<td>ROD_EXTENSION</td>
<td>The extension to use with ROD. Mandatory</td>
</tr>
<tr>
<td>ROD_MUTE</td>
<td>0 = Disable the mute feature. 1 = Enable the mute feature. Mandatory ROD_MUTE=1</td>
</tr>
<tr>
<td>ROD_ROD</td>
<td>0 = Disable the Record On Demand feature. 1 = Enable the Record On Demand feature. Mandatory ROD_ROD =1</td>
</tr>
<tr>
<td>ROD_SOD</td>
<td>0 = Disable the Stop On Demand feature. 1 = Enable the Stop On Demand feature. Mandatory ROD_SOD =1</td>
</tr>
</tbody>
</table>
Screen Capture for Acquisition Recording Silent Install Parameters

The following properties determine how Screen Capture for Acquisition Recording is configured silently on the agent desktops.

<table>
<thead>
<tr>
<th>Basic Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_COMMAND_LINE=1</td>
<td>Mandatory</td>
</tr>
<tr>
<td>SRA_ENCODING</td>
<td>Specifies the encoding level.</td>
</tr>
<tr>
<td>1 = Low</td>
<td>2 = Medium</td>
</tr>
<tr>
<td>3 = High</td>
<td></td>
</tr>
<tr>
<td>SRA_OPENFIREWALLPORTS=0</td>
<td>0 = Do not open firewall port.</td>
</tr>
<tr>
<td>1 = Open firewall port.</td>
<td></td>
</tr>
<tr>
<td>SRA_POLLFULLSCREEN</td>
<td>Specifies the recording method.</td>
</tr>
<tr>
<td>0 = Standard</td>
<td>1 = Full screen</td>
</tr>
</tbody>
</table>

CTI Link Agent Silent Install Parameters

The following properties determine how CTI Link Agent is configured silently on the agent desktops.

<table>
<thead>
<tr>
<th>Basic Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_COMMAND_LINE=1</td>
<td>Mandatory</td>
</tr>
<tr>
<td>ILA_EXTENSION</td>
<td>The extension to use with CTI Link Agent (ILA).</td>
</tr>
<tr>
<td>Default = Empty</td>
<td></td>
</tr>
<tr>
<td>ILA_INFOLINKIP</td>
<td>The HTTP/HTTPS Alias of the server hosting the Acquisition Integration Service.</td>
</tr>
<tr>
<td>Mandatory</td>
<td></td>
</tr>
<tr>
<td>ILA_INFOLINKIP1 to ILA_INFOLINKIP8</td>
<td>The HTTP/HTTPS Alias of the servers hosting the Acquisition Integration Services (numbered 1 to 8).</td>
</tr>
<tr>
<td>Default = Empty</td>
<td></td>
</tr>
</tbody>
</table>
Logger Silent Install Parameters

The following properties determine how Logger is configured silently on the agent desktops.

<table>
<thead>
<tr>
<th>Basic Parameters</th>
<th>Description and Default Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsiFile</td>
<td>LoggerInstallation.msi</td>
</tr>
<tr>
<td>USE_COMMAND_LINE</td>
<td>USE_COMMAND_LINE=1</td>
</tr>
<tr>
<td></td>
<td>Mandatory</td>
</tr>
<tr>
<td>VERINTFOLDER</td>
<td>%VERINTFOLDER%</td>
</tr>
</tbody>
</table>
## Related Documentation

The following table lists the relevant administration and user guides for each desktop application.

<table>
<thead>
<tr>
<th>Desktop Application</th>
<th>Guide Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Capture with AIM</td>
<td>AIM Quick Reference Guide</td>
</tr>
<tr>
<td>Playback</td>
<td>Interactions for Supervisors/Agents User Guide</td>
</tr>
<tr>
<td>Form Designer</td>
<td>Quality Monitoring Form Designer User Guide</td>
</tr>
<tr>
<td>Standalone Form Designer</td>
<td>Standalone Form Designer Installation Guide</td>
</tr>
<tr>
<td>Pop-up Notification System Client</td>
<td>Workforce Management Administration Guide</td>
</tr>
<tr>
<td></td>
<td>Workforce Management Schedulers’ Guide</td>
</tr>
<tr>
<td></td>
<td>Workforce Management Managers’ Guide</td>
</tr>
<tr>
<td></td>
<td>Workforce Management Agents Guide</td>
</tr>
<tr>
<td>Content Producer</td>
<td>Content Producer Installation and Upgrade Guide</td>
</tr>
<tr>
<td></td>
<td>Content Producer User Guide</td>
</tr>
<tr>
<td>Forecasting and Scheduling</td>
<td>Workforce Management Schedulers’ Guide</td>
</tr>
<tr>
<td>Strategic Planner</td>
<td>Workforce Management Planners’ Guide</td>
</tr>
<tr>
<td>Phonetics Boosting</td>
<td>Phonetics Boosting User Guide</td>
</tr>
<tr>
<td>Real Time Speech Calibration Application</td>
<td>Real Time Speech Calibration Application User Guide</td>
</tr>
<tr>
<td>Desktop Gadgets</td>
<td>Scorecards User Guide</td>
</tr>
<tr>
<td></td>
<td>Scorecards Administration Guide</td>
</tr>
<tr>
<td>DPA Process Discovery</td>
<td>Desktop and Process Analytics (DPA) Installation and Configuration Guide</td>
</tr>
</tbody>
</table>