OpenScape Business V1

Tutorial
Clients on
Microsoft Windows 2008 R2 Remote Desktop Services / Citrix XenApp 6.5
Version 1.0
Definitions

HowTo
An OpenScape Business HowTo describes the configuration of an OpenScape Business feature within the OpenScape Office administration. It addresses primarily trained administrators of OpenScape Business.

Tutorial
Within the OpenScape Business tutorials procedures for installation, administration and operation of specific devices, applications or systems, which are connected to OpenScape Business, are described. The tutorial addresses primarily trained administrators of OpenScape Business.
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<th>Version</th>
<th>Changes</th>
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<td>2013-06-08</td>
<td>1.0</td>
<td>Initial Creation</td>
</tr>
</tbody>
</table>
1. Environment and Preconditions

- Microsoft Windows 2008 R2 Server, Standard Edition (64 Bit)
- Windows "Desktop Experience Feature" installed (for fax viewer and audio)
- Citrix XenApp 6.5 Enterprise Edition
- Citrix Receiver 3.4.0.29577
- Java Runtime must be installed for myPortal / myAttendant / myReports application; Test is done with current version JRE 1.7.0.21-b11 32 bit
- Microsoft Outlook 2010 SP1 32 or 64 bit
- Actual Microsoft Windows/Office Updates and Service Packs installed.
- OpenScape Business S, V1R1.1.0_201

2. Conclusions and Restrictions

The Citrix Seamless Mode can be used with some minor restrictions.

- It is strongly recommended to use 32 Bit Java Runtime Environment (JRE) instead 64 Bit JRE to save memory resources on server.
- Please note that myAgent is currently not generally released for Citrix / Remote Desktop Server installations. A customer project specific evaluation is required.
- "myPortal" and "myPortal for Outlook" Favorites window disappears from screen on undocking in Citrix seamless mode.
- OpenScape Business Auto Update tooltips are not shown to user in Citrix seamless mode
- **myPortal Smart** No relevant issues could be found while using myPortal Smart on Remote Desktop Server or Citrix in Desktop Mode. However, myPortal Smart is not officially released on Remote Desktop Server, because underlying Adobe AIR 3 platform does not list Windows Server 2008 R2 or Windows Server 2012 in supported Windows platform list.
- **myPortal Smart** Application cannot be used in Citrix seamless mode, because application shape is not recognized correctly. There is always a square window frame around the application.
3. Installing Communications Clients

Installation must be done with Administrator privileges.

Microsoft advises to put Remote Desktop Services (Terminal Services) Server into install mode, before installing or removing programs. This can be done via Control Panel -> Install Application on Remote Desktop... This is the same as typing "change user /install" at the command prompt and "change user /execute" after setup has finished.

The CommunicationsClients installation files can be downloaded from OpenScape Business Assistant (WBM) Service Center -> Download Center. The other option is to use (or map) the shared applications directory on OpenScape Business:

```
\< OpenScape Business UC Booster IP Address >\application\install-common\n```

or

```
\< OpenScape Business S IP Address >\applications\install-common\n```

User name: home
Password: hoomesw

![Install-common window](image)

Execute the CommunicationsClients.exe program and confirm the Microsoft “Security Warning”:

![Security Warning window](image)
Welcome to the Communications Clients Installation Wizard

It is strongly recommended that you exit all Windows programs before running this setup program.

Click Cancel to quit the setup program, then close any programs you have running. Click Next to continue the installation.

WARNING: This program is protected by copyright law and international treaties.

Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.

Applications should be installed in 32-Bit program files directory (default setting)
Select “Complete” installation for all clients and Fax Printer driver. Select “Custom” to choose applications separately. “Typical” will install myPortal/myAttendant only.

All clients are installed in this example:

Proceed with <Next> until setup wizard is finished...
4. Installing myReports

Installation must be done with Administrator privileges.

Microsoft advises to put Remote Desktop Services (Terminal Services) Server into install mode, before installing or removing programs. This can be done via Control Panel-> Install Application on Remote Desktop.... This is the same as typing "change user /install" at the command prompt and "change user /execute" after setup has finished.

The myReports installation file can be downloaded from OpenScape Business Assistant (WBM): Service Center-> Download Center. The other option is to use (or map) the shared applications directory on OpenScape Business:

```
\< OpenScape Business IP Address >\applications\install-myReports\  
User name: hoome  
Password: hoomesw
```

![myReports installation](image)

The myReports.msi must be used in terminal server environment. Confirm the Microsoft "Security Warning":

![Security Warning](image)
Installation is done without user input to “ProgramData\myReports\myReports.jar”
Proceed with <Next> until setup wizard is finished.
5. Publishing via Citrix XenApp Server

5.1. Disable myPortal for Outlook for a defined user group

The Outlook Add-In is loaded in context of every user on server that is starting Outlook application. Following configuration can be used to avoid loading of Add-In for a defined group of users.

Create a new User-Group (e.g. "No_Outlook_Plugin") on the Remote Desktop Server. This can be done via Computer Management or in Active Directory.
Assign all usersto group, that should not see and use myPortal for Outlook

Open properties dialog of OutlookIntegration file “OLI2010.dll” with right mouse click on file. When Microsoft Outlook 2003/2007 is used then “OLI.dll” is the relevant file.
Select security settings and deny „Full control“ for the created user group.

5.2. Publishing myAgent in XenApp 6.5

The myAgent application is published as any other application:
5.3. Publishing myPortal in XenApp 6.5

The myPortal application is published as any java application. The command line must be configured with full path to java runtime platform. Quotation marks are necessary if there are spaces in path name. Please note, that 32-Bit Java is recommended to be used for myPortal to save memory resources on server:

C:\Windows\SysWOW64\javaw.exe -jar "C:\Program Files (x86)\CommunicationsClients\myPortal\myPortal.jar"
5.4. Publishing myReports in XenApp 6.5

The myReports application is published as any java application. The command line must be configured with full path to java runtime platform. Quotation marks are necessary if there are spaces in path name. Please note, that 32-Bit Java is recommended to be used for myReports to save memory resources on server:

```
C:\Windows\SysWOW64\javaw.exe -jar "C:\ProgramData\myReports\myReports.jar"
```

5.5. Fax Printer for hosted applications

The “CommunicationsClients Fax Printer” is available for all XenApp server hosted applications in print dialog. Basically there is no additional configuration needed.

However, XenApp supports rather complex printing scenarios where client and network printers are also available in Citrix session (“Auto create client printers”), where client printer settings (e.g. “default printer”) affects Citrix session...

The behaviour can be changed with Windows group policies for Terminal Services. More detailed settings can be done with Citrix policies.

5.5.1. Configure “CommunicationsClients Fax Printer” as default printer:

When client printers are created in Citrix session, then also client default printer will override the user setting on server side. To avoid this, open “XenApp Delivery Services” console and create a new policy for “User” and give it a reasonable name:
Enable setting “Do not adjust user’s default printer”:

This can also be done specific for some users only.

When the client now configures the “CommunicationsClients Fax Printer” as default printer, then this setting will be persistent.
5.6. Publishing Fax CoverPage Editor in XenApp 6.5

The Fax CoverPage Editor is published as any other application. It can also be opened out of Printer dialog without publishing before.

Data Execution Prevention (DEP) needs to be disabled on Microsoft Windows 2008 R2 Server. When DEP is enabled, then exclusion needs to be defined for Fax CoverPage Editor:
6. Auto update

Auto update of applications will wait to execute, as long as one instance of application is still in use by any user. When all instances of applications are closed, then auto update will be performed automatically. There is no user input necessary. Administrator will see from console login, when auto update has not been performed yet.

After left mouse click on this message, the OpenScape Business Update dialog is opened. All listed processes must be closed, before Auto update can take place. Only users with Administrator privileges will see the “Force Update” button. All listed processes, except Outlook, are closed on using “Force update” button:
6.1. Auto update of myReports application

The above mentioned Auto update service does not include the myReports application.

When system update took place then new myReports version will be downloaded on next application start. Log in with administrator account and start myReports application once.

6.2. Update via setup wizard (CommunicationsClients.exe)

Attention - All client applications must be closed, before running setup wizard!

Running setup wizard is not necessary. The update will be performed by auto update service automatically. However, if auto update does not take place (e.g. disabled, or system offline) then setup wizard can be used for update, as long as applications are not in use by any client.

Microsoft advices to put Remote Desktop Services (Terminal Services) server into install mode, before installing or removing programs. This can be done via Control Panel-> Add /Remove programs. This is the same as typing "change user /install" at the command prompt and "change user /execute" after setup has finished.
7. Citrix Receiver: Online Plug-in (client)

The published applications and Desktop on Citrix server can be accessed by user via Citrix Receiver software. Citrix Receiver can be found in system tray after installation.

Login to Citrix XenApp via Browser:
8. Test results

8.1. Server Resources

Using OpenScape Business applications has an impact to the PC where they are installed. In case of terminal server this summarizes for each user that is using the application. The following specific values and formulas have to be considered when calculating the requirements for the terminal server.

Reference system:
- Windows 2008 R2 Server
- Intel Xeon CPU E5620; 2.40GHz (4 processors)
- 5 GB RAM

8.2. RAM – additional memory requirement

Memory needed by each instance of application:

<table>
<thead>
<tr>
<th>OpenScape Business client application</th>
<th>Approximately allocated memory per client</th>
</tr>
</thead>
<tbody>
<tr>
<td>myPortal / myAttendant - 32 Bit JRE</td>
<td>app. 70 MB</td>
</tr>
<tr>
<td>myPortal for Outlook</td>
<td>app. 100 MB</td>
</tr>
<tr>
<td>myAgent</td>
<td>app. 150 MB</td>
</tr>
</tbody>
</table>

8.3. CPU – additional CPU load from applications

myPortal

\[
\text{<Processor load> [\%]} = \frac{\text{<\#user/app> * <telephony traffic> [BHCA]}}{360}
\]

myAttendant

\[
\text{<Processor load> [\%]} = \frac{\text{<\#user/app> * <telephony traffic> [BHCA]}}{375}
\]

myAgent

\[
\text{<Processor load> [\%]} = \frac{\text{<\#user/app> * <telephony traffic> [BHCA]}}{150}
\]
myPortal for Outlook

\[
\text{<Processor load> [\%]} = \frac{\text{<user/app>}}{2150} \times \text{<telephony traffic> [BHCA]}
\]

Note: BHCA = number of calls (attempts and completed calls) per hour of the whole system

Example for a mixed installation

10 myPortal + 2 myAttendant + 10 myAgent + 5 myPortal for Outlook:

Number of users connected to the system = 30
6 calls per hour = 6 * 30 → 180 BHCA

\[
\begin{align*}
\text{CPU load myPortal} &= \frac{10 \times 180}{360} \sim 5\% \\
\text{CPU load myAttendant} &= \frac{2 \times 180}{375} \sim 1\% \\
\text{CPU load myAgent} &= \frac{10 \times 180}{150} \sim 12\% \\
\text{CPU load myPortal for Outlook} &= \frac{5 \times 180}{2150} \sim 0.5\%
\end{align*}
\]

CPU load for OpenScape Business applications → \textbf{18.5\%}

Contact Center with higher agent activity (e.g. 20 calls per hour):

20 users with 6 calls per hour
10 agents with 20 calls per hour → 120 + 200 = 320 BHCA

\[
\begin{align*}
\text{CPU load myPortal} &= \frac{10 \times 320}{360} \sim 9\% \\
\text{CPU load myAttendant} &= \frac{2 \times 320}{375} \sim 2\% \\
\text{CPU load myAgent} &= \frac{10 \times 320}{150} \sim 21\% \\
\text{CPU load myPortal for Outlook} &= \frac{5 \times 320}{2150} \sim 1\%
\end{align*}
\]

→ CPU load for OpenScape Business applications \sim 33\%

These values are rough technical values and should be used for project calculation only, real values could be different.
8.4. Detailed test results with myPortal / myAttendant

Following behavior and restrictions should be considered:

- Citrix seamless mode: desktop dialing is not working, when call number is selected in applications running on local operating system.
- Citrix seamless mode: Favorites window auto hide is not supported in Citrix seamless mode. The myPortal Favorites window disappears from screen on undocking it. It does not show up again on touching left screen border with mouse pointer. Work around: Maximize myPortal main window or move the myPortal main window to left edge of screen.
- Other server installed application (like MS Outlook, MSIE, Fastclient) can be started from myPortal, even if they are not a published application for this user on XenApp server (e.g. by Outlook calendar integration, contact import, send email...)

8.5. Detailed test results with myPortal for Outlook

Following behavior and restrictions should be considered:

- Citrix seamless mode: The Favorites window auto hide is not supported in Citrix seamless mode. The myPortal Favorites window disappears from screen on auto hide to left or right side. It does not show up again on touching the screen border with mouse pointer. Work around: Maximize Outlook main window or move the Outlook main window to screen border. Auto Hide function should be disabled.
- Citrix seamless mode: Hot keys do not work when local application on client PC has focus. They only work, when Citrix hosted applications have input focus.

8.6. Detailed test results with myAgent

Following behavior and restrictions should be considered:

- Citrix seamless mode: Hot keys do not work when local application on client PC has focus. They only work, when Citrix hosted applications have input focus.
About Unify
Unify is one of the world’s leading communications software and services firms, providing integrated communications solutions for approximately 75 percent of the Fortune Global 500. Our solutions unify multiple networks, devices and applications into one easy-to-use platform that allows teams to engage in rich and meaningful conversations. The result is a transformation of how the enterprise communicates and collaborates that amplifies collective effort, energizes the business, and enhances business performance. Unify has a strong heritage of product reliability, innovation, open standards and security.

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