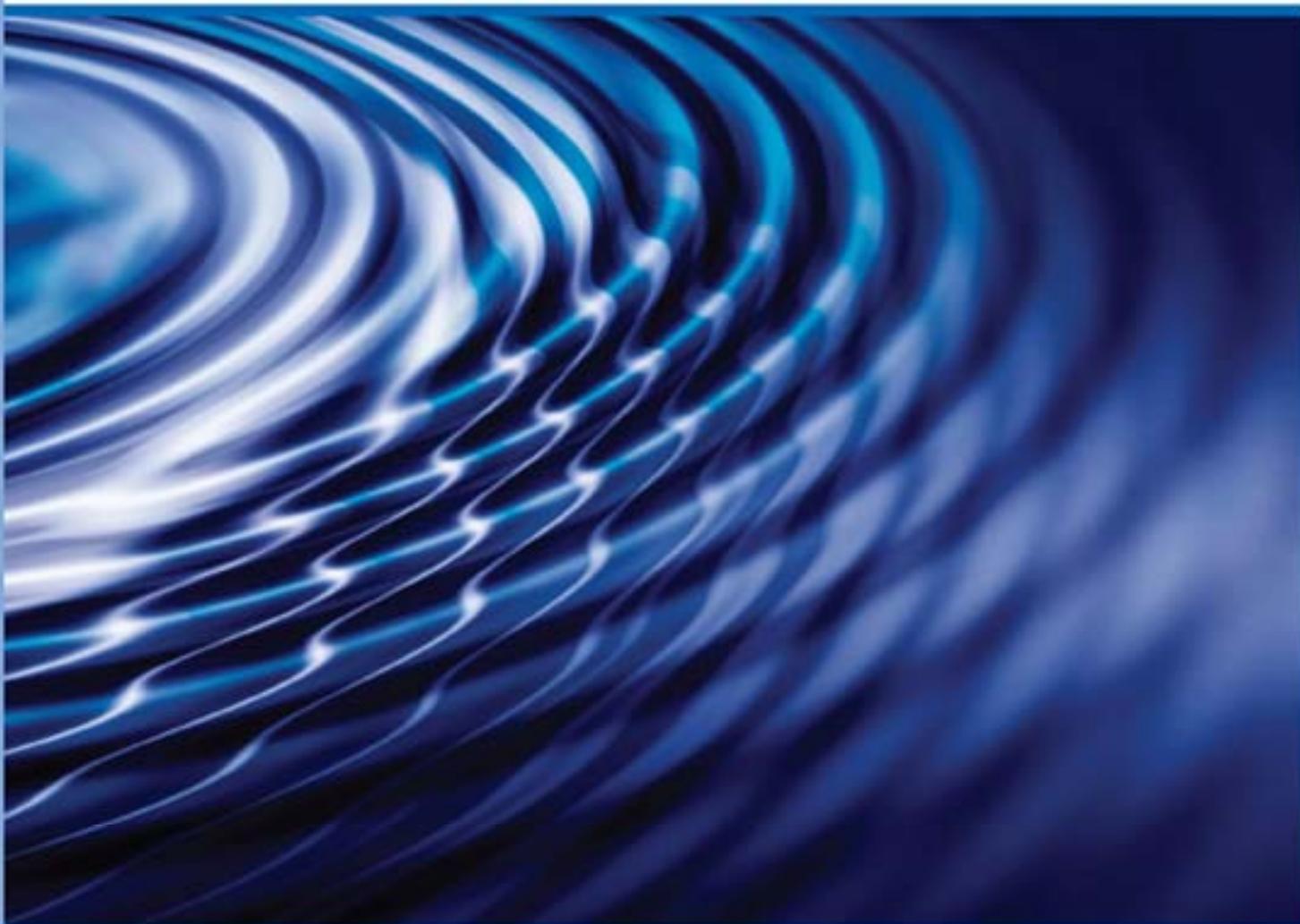


Deployment Guide
Reflection X 2011
Reflection Suite for X 2011



Attachmate®
Reflection®
2011



Deployment Guide

Version R2



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CHAPTER 1

Introduction

Reflection X 2011 and Reflection Suite for X 2011 provide a suite of products to help you work with your host applications. This guide is designed to help administrators plan installations and deploy software to user workstations.



This deployment guide provides a high-level view of the deployment options available to you. The icon shown here is used to indicate pointers to more detailed information available in other user guides or Help topics.

Product Overview

The list below summarizes the applications and services that are available when you install Reflection X 2011 or Reflection Suite for X 2011 on Windows systems. In some cases, features that are installed by default include sub-features that are not installed by default. You can use the Attachmate Installation Program **Feature** tab to view feature installation details that are not shown here.

Reflection X Advantage	[Default] Attachmate's next generation X server. You can choose to run in standalone mode and/or domain mode.
X Manager	[Default] Standalone session manager for Reflection X Advantage. Use X Manager to connect to X clients. No other applications or services need to be installed.
X Manager for Domains	Domain mode session manager. Use X Manager for Domains to connect to X clients when you have installed and configured a Reflection X Advantage domain.
X Administrative Console	Reflection X domain administration. This is only required for domain administrators. It can be installed on one or more administrative workstations.
Domain Services	Installs the Reflection X service. Computers with this service installed can be configured to act as nodes in the Reflection X domain. Install the Domain Controller sub-feature only on the Reflection X domain controller.
Reflection X (Legacy)	Attachmate's legacy X server. Note: This feature is not available with the 64-bit installer.
Reflection Workspace	[Default] Terminal emulation and productivity features.
Emulation	[Default] Emulation features for the Reflection Workspace.
3270/5250	[Default] Terminal session and printing support for IBM 3270/5250. Note: These features are not included in Reflection X 2011.
UNIX and OpenVMS	[Default] Terminal session support for UNIX and OpenVMS.

Productivity	[Default] Productivity features for the Reflection Workspace.
Application Programmer Interface	.NET assemblies and help documentation for .NET API development.
Visual Basic for Applications	[Default] Macro support for the Reflection Workspace emulators.
Web Browser	[Default] Support for web pages in the Reflection Workspace.
Reflection Quick Launch	Loads portions of Reflection 2011 into memory upon operating system boot to reduce program startup time.
Reflection FTP Client	[Default] Secure file transfer using the FTP and SSH protocols.
Utilities	[Default] Kerberos Manager and Reflection Key Agent. Note: These utilities are not used by Reflection X Advantage.



Separate UNIX and Mac installers are also available for Reflection X Advantage only. For information about installing on these systems, see *Install on UNIX* and *Install on a Mac* in the *Reflection X Advantage Planning and Installation Guide*. (http://docs.attachmate.com/reflection/rxa/4.0/en/rxa_plan_install_guide_en.pdf)

Planning Your Deployment

Reflection supports a variety of options to help you get users up and running quickly and effectively. You can choose from several different approaches for installing and deploying Reflection, ranging from “out-of-the-box” installations to highly customized deployments. Use these lists to help you plan your deployment.

 All Windows Installations	Go to
<input type="checkbox"/> Deploy an "out-of-the-box" version, using the factory defaults	Page 10
<input type="checkbox"/> Provide users with an installation that includes non-default features	Page 11
<input type="checkbox"/> Include customized configuration files with the installation	Page 12
<input type="checkbox"/> Distribute centrally managed sessions from a web page	Page 15
 Reflection X Advantage Sessions	Go to
<input type="checkbox"/> Deploy X Manager for Domains software and session settings from a web page	Page 17
<input type="checkbox"/> Deploy X Manager (standalone) session settings from a web page	Page 15
<input type="checkbox"/> Use a Reflection X Advantage domain to deploy session settings	Page 18
<input type="checkbox"/> Control startup behavior	Page 18
 Reflection Workspace Terminal Sessions	Go to
<input type="checkbox"/> Deploy session settings	Page 20
<input type="checkbox"/> Customize the Reflection Workspace user interface	Page 21
<input type="checkbox"/> Control startup behavior	Page 22
<input type="checkbox"/> Lock down application features	Page 22
 Legacy Reflection X sessions	Go to
<input type="checkbox"/> Deploy session settings	Page 25
<input type="checkbox"/> Customize the X Manager user interface	Page 25
<input type="checkbox"/> Control startup behavior	Page 25
<input type="checkbox"/> Lock down application features	Page 25

CHAPTER 2

Deploying Software using Microsoft Installer Technology

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Use the Attachmate Customization Tool	11
Specify which Features are Installed on User Workstations	11
Include Customized Configuration Files with the Installation	12

This chapter describes how to use Microsoft Installer Technology to install software and files on user workstations.

Features

- Install any or all components (standalone, domain mode, emulators, and FTP client).
- Create a customized installation with the correct options for your users.
- Create companion installers to add files to your installation.
- Configure shortcuts.
- Chain installations and/or run additional programs automatically with your customized installation.

Requirements and limitations

- Deploys only to Windows systems.
- Software is not updated automatically after the install; an additional install must be made available to users.

Create an Administrative Installation Point

To prepare your environment for deployment, start by installing an administrative installation image on a network share. An administrative installation image is a source image of the application, similar to an image on a DVD. It includes all the files required to run an installation, as well as the administrative tools used for customization.

To create an administrative installation point

- 1 Start the Attachmate Installation Program (`setup.exe`).
- 2 From the **Advanced** tab, click **Create an Administrative install image on a server**.
- 3 Click **Continue**, and then browse to the network share you want to use for the administrative install image.
- 4 Click **Install Now**.

Deploy an "Out-of-the-Box" Version using Factory Defaults

The Attachmate Installation Program (`setup.exe`) is Attachmate's recommended tool for installing and deploying Reflection. This tool is configured to install using the default language and also supports features provided by the Attachmate Customization Tool. You can also deploy using the Microsoft Installer file (*.msi) provided in the Administrative Install.

Note: To review the features included in a default installation, see *Product Overview* (page [5](#)).

To deploy Reflection with the Attachmate Installation Program (setup.exe)

- 1 Create an administrative install point.
- 2 Run setup using either of the following approaches.
 - Direct users to launch the installer by running `setup.exe` from the installation point. With this option, users can modify the feature set.

-or-

 - Configure a shortcut or script to run `setup.exe` from the installation point. The command line options shown here install using the default feature set:

To do this	Use this command line
Display a progress bar and a Cancel button.	<code>setup.exe /install</code>
Display a progress bar with no Cancel button.	<code>setup.exe /install /passive</code>
Perform silent install with no display.	<code>setup.exe /install /quiet</code>

You can also run the installation using the Microsoft `msiexec` command. The basic syntax is:

```
msiexec -i path_to_administrative_installation_point\msi_filename.msi
```

Use the following command to view help about additional `msiexec` options:

```
msiexec -?
```

Use the Attachmate Customization Tool

To customize Reflection or customize the way it is installed, you can use the Attachmate Customization Tool (ACT). This tool has two modes that are used for different customization tasks:

- To install configuration files that customize the products you are installing, use the Attachmate Customization Tool to create a companion installer package (MSI); then deploy your companion installer with the original installation, or install the companion package independently.
- To customize how Reflection is installed (for example, to change the feature set that is installed), you can use ACT to create a Microsoft transform (MST) file that modifies the primary installation performed by the Attachmate Reflection MSI file. When the transform is deployed along with the Attachmate Reflection MSI file, it changes the default installation settings to the settings specified in the MST file.

To open the Attachmate Customization Tool

- 1 Open a DOS command window and enter the following command:

```
path_to_setup\setup.exe /admin
```

- 2 The **Select Customization** dialog box prompts you to choose which mode you want to open.



The procedures that follow describe two basic modifications you can make using the Attachmate Customization Tool. More detailed information is available in the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>), and in the Attachmate Customization Tool application Help screens.

Specify which Features are Installed on User Workstations

You can use the Attachmate Customization Tool to create a transform file (*.mst) that modifies which features are installed.

To select features, components, and languages to install

- 1 *Create an administrative install point.* (page [9](#))
- 2 Start the Attachmate Customization Tool.

```
path_to_setup\setup.exe /admin
```
- 3 Select **Create a new Setup customization file for the following product.**
- 4 Under **Features**, choose **Set Feature Installation States.**
- 5 Use the feature tree to configure each feature's installation state.
- 6 Click **File > Save As.**

Your changes are saved to a transform (*.mst) file.

You will need to deploy the transform with the primary installation. Transforms can be used with any install started with `setup.exe` or with command-line installs (used by many deployment tools). The installer can only apply transforms during an installation. The following procedure describes how to add your transform file to installations started with the Attachmate Installation Program (`setup.exe`).

To add the transform to an install started with `setup.exe`

- 1 Start the Attachmate Customization Tool.
`path_to_setup\setup.exe /admin`
- 2 Select **Open an existing Setup customization file or Companion installer**, and then click **OK**.
- 3 In the **Open** dialog box, browse to select your transform (`.mst`) file.
- 4 Click **User interface** and select **Use this customization with interactive installs using `setup.exe`**.

When you save your transform with this option selected, Attachmate Customization Tool automatically updates the `setup.ini` file to apply your transform to the Reflection installation by adding the following line to the `[Setup]` section:

```
CustomTransform=<your_transform.mst>
```

- 5 From the **File** menu, click **Save**. (If **Save** appears dimmed, click **Exit** and you will be prompted to save the file.)

The transform can now be deployed to end users via the `setup.exe` file. (Users can run `setup.exe`, the `setup.exe` file can be called from a script, or `setup.exe` can be initiated from a command line.)

Include Customized Configuration Files with the Installation

Reflection applications use a variety of files to store configuration information. You can use the Attachmate Customization Tool to create a companion installer (`*.msi`) to install these files on user computers. The tool also includes a feature to include your companion package automatically when users run the Attachmate Installation Program.

Before you start, become familiar with how to customize your Reflection application and identify the file or files that contain your customized settings.

To create a companion package that installs customized files

- 1 *Create an administrative install point.* (page [9](#))
- 2 Install the product you want to customize on your administrative workstation.
- 3 Make your customizations and locate the file or files that contain your customized settings.
- 4 Start the Attachmate Customization Tool.
`path_to_setup\setup.exe /admin`
- 5 Select **Create a new companion installer**.

- 6 Select **Add files** and specify which files you want to include in this package and where you want to install them on user workstations.
- 7 Click **File > Save As** to save your companion package.

You can deploy the package you just created in a number of ways. The next procedure is one example. It creates a transform file that you can use to include this package with the Reflection installation.

To install the companion package automatically when users run the Attachmate Installation Program

- 1 Start the Attachmate Customization Tool (or, if it is still running click **File > New**) and select **Create a new Setup customization file for the following product**.
- 2 Click **Add installation and run programs**.
- 3 Click **Add**. For **Target**, specify the companion package you just created.
- 4 Click **File > Save As** to save your transform.

Note: When you save your transform, the Customization Tool automatically updates the `setup.ini` file, adding a `[RunPrograms]` section with instructions for installing your companion package.

- 5 Instruct users to install using the Attachmate Installation Program (`setup.exe`).

CHAPTER 3

Deploying Sessions using Reflection for the Web

Reflection for the Web is an Attachmate product that provides administrators with the ability to deploy Reflection sessions from a single management console. If you installed the Reflection Management Server, you can use the Reflection Administrative WebStation to deploy sessions for all of the products included in Reflection X 2011 and Reflection Suite for X 2011. Features available include the following:

- Manage sessions for multiple Reflection products from a single console.
- Configure connections to go through the Reflection for the Web security proxy server, which provides SSL/TLS encryption to the proxy. The security proxy server can also restrict the visibility of your hosts over the network, which enables you to limit host access to authorized users and members of LDAP groups.
- If you are deploying Reflection X Advantage, configure sessions to launch X clients directly, without displaying the X Manager window.

Note: Reflection for the Web is sold and licensed separately from Reflection X 2011 and Reflection Suite for X 2011.

Setting up Sessions using the Reflection Administrative WebStation

You can use the Reflection Administrative WebStation to deploy sessions for all of the products included in Reflection X 2011 and Reflection Suite for X 2011. The basic procedure is outlined below.

To deploy Reflection sessions using the Reflection for the Web Administrative WebStation

- 1 Install Reflection X 2011 or Reflection Suite for X 2011 on the administrative and end-user workstations.
- 2 Install the Reflection for the Web Management server on the web server as shown in your Reflection for the Web documentation and make sure you have administrative credentials for the Reflection Management Server.
- 3 Launch the Administrative WebStation and click **Session Manager**.
- 4 Create a session for any Reflection application you installed in Step 1. When you do this, Reflection for the Web launches that application in Administrative WebStation mode. Configure and save your settings. You'll be prompted to confirm that you want to send the settings to the Administrative WebStation.
- 5 Use the Access Mapper to configure user access to the session.
- 6 Point users to the Reflection for the Web URL to access Reflection sessions.



For a more detailed procedure, see *Deploying Session Documents with the Administrative WebStation* in the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/depoy/deploymentguide.pdf>).

Requirements for Reflection X Advantage sessions

If you are deploying Reflection X Advantage sessions using the Reflection Administrative WebStation, be aware of the following additional requirements and limitations.

- A Reflection for the Web proxy server must be configured.
- Clients must connect using Secure Shell
- Reflection PKI Services Manager must be installed and configured to validate the security proxy certificate.

Note: Reflection PKI Services Manager is a separate utility that you can download from the Attachmate website at no additional charge.

- Administrator and user workstations must be Windows systems, and X Manager (standalone) must be installed on these computers.
- Users who launch sessions from Reflection for the Web can't save X Manager settings.



For detailed information about deploying Reflection X Advantage sessions, see *Distributing Sessions with the Administrative WebStation* in the *Reflection X Advantage Planning and Installation Guide*. (http://docs.attachmate.com/reflection/rxa/4.0/en/rxa_plan_install_guide_en.pdf)

CHAPTER 4

Deploying Reflection X Advantage Sessions

In this Chapter

Deploy Reflection X Advantage with Java Web Start	17
Set up a Reflection X Advantage Domain for Centralized Session Management	18
Control Startup Behavior	18

This chapter provides an overview of deployment and distribution methods that apply specifically to Reflection X Advantage.



For additional information, and detailed procedures to help you implement the strategies described here, refer to the *Reflection X Advantage Planning and Installation Guide*. (http://docs.attachmate.com/reflection/rxa/4.0/en/rxa_plan_install_guide_en.pdf)

Deploy Reflection X Advantage with Java Web Start

If you set up a Reflection X domain, you can use Java Web Start technology to deploy X Manager for Domains to user workstations from a Web server.

Features

- Create a web link that installs and launches X Manager for Domains.
- Deploy updates to the software and session settings from the same web link.
- Deploy to all supported platforms.

Requirements and limitations

- The domain controller and any required nodes must be installed and configured.
- Deploys X Manager for Domains only (not standalone X Manager).



For details about deploying with Java Web Start, see *Deploying with Java Web Start* in the *Reflection X Advantage Planning and Installation Guide*. (http://docs.attachmate.com/reflection/rxa/4.0/en/rxa_plan_install_guide_en.pdf)

Set up a Reflection X Advantage Domain for Centralized Session Management

You can use Reflection X domains to simplify session setup for end users. As administrator, you can configure public session definitions. Users running X Manager for Domains can launch these preconfigured public sessions from their workstations.

Features

- The domain administrator can provide preconfigured public sessions to users.
- Updates to centralized sessions are automatically available to users.
- Users can configure and save personal sessions in addition to using public sessions.
- By setting up a domain, you can take advantage of other domain services; such as session suspend/resume, and improved performance in high-latency or low bandwidth networks.

Requirements

- The domain controller and any required nodes must be installed and configured.
- X Manager for Domains must be installed on user workstations.



For a detailed procedure, see *Domain Setup: Centralize Session Configuration* in the *Reflection X Advantage Planning and Installation Guide* (http://docs.attachmate.com/reflection/rxa/4.0/en/rxa_plan_install_guide_en.pdf).

Control Startup Behavior

Reflection X Advantage provides command line options that can be used to launch the standalone X Manager (**rxmgr**) and X Manager for Domains (**rxmgrdomains**). Features available include:

- Launch one or more X clients using preconfigured session and client definitions.
- Launch X clients without displaying the X Manager user interface.



Command line options are documented in the Reflection X Advantage application Help. For details about command line options and sample commands, see *rxmgr Command Line - Standalone X Manager* and *rxmgrdomains Command Line - X Manager for Domains*.

CHAPTER 5

Deploying Reflection Workspace Terminal Sessions

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Customize Reflection Terminal Sessions	20
Control Startup Behavior	22
Lock Down Workspace Settings	22

This chapter provides an overview of deployment and distribution methods that apply specifically to the Reflection Workspace. Both Reflection X 2011 and Reflection Suite for X 2011 include the Reflection Workspace, which you can use to open terminal sessions for connecting to your host systems. Both products include support for connecting to UNIX and OpenVMS terminals. Reflection Suite for X 2011 also includes support for terminal and printer emulation for IBM hosts.

There are two basic approaches available for deploying customized versions of the Reflection Workspace:

- Create configuration files for your users and include them in a companion installer. You can use this approach to deploy host connection settings, and to deploy a variety of custom configuration files, including keyboard maps, hotspots, mouse maps, and themes, as described in *Include Customized Configuration Files with the Installation* (page [12](#)).
- Use the **Modify User settings** feature of the Attachmate Customization Tool. You can use this approach to configure settings that apply globally to the Reflection Workspace and all user documents. For example, you can use this option to set your preference for the Workspace look and feel (ribbon, classic, or browser), and to control which features end-users have access to.



This chapter provides a brief overview of features available for system administrators who are deploying the Reflection Workspace. For more detailed information, see the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

Using Attachmate Customization Tool to Modify User Settings

You can use the **Modify user settings feature** of the Attachmate Customization Tool to configure custom Reflection Workspace settings and control user access to Workspace features.

To modify user settings from the Attachmate Customization Tool

- 1 *Create an administrative install point.* (page [9](#))
- 2 Install Reflection on your workstation.
- 3 From the workstation on which you installed Reflection, open a DOS command window and enter the following command:


```
path_to_setup\setup.exe /admin
```
- 4 Select **Create a new companion installer.**
- 5 From the navigation pane, click **Specify install locations** and choose whether you want this installation to apply to all users of a machine or only the user who installs it.
- 6 From the navigation pane, click **Modify User settings.**
 - Select "Reflection 2011 - Workspace Settings" to open the **Reflection Workspace Settings** dialog box, which you can use to change the default trust center and workspace settings. The settings you configure are saved to an `Application.settings` file.
 - Select one of the "*.access" options to open the Permissions Manager tool, which you can use to restrict access to Reflection settings and features. The settings you configure are saved to a special configuration file (an `.access` file).

The settings you configure are automatically saved to the correct file (`Application.settings` or `*.access`). If you selected to deploy the file to everyone who uses the machine, the companion installer file is automatically configured to deploy this file to the `[CommonAppDataFolder]\Attachmate\Reflection\Workspace\R2011_R2` folder. If you select to deploy the file only for one user, it is configured to deploy this file to the `[AppDataFolder]\Attachmate\Reflection\ Workspace\R2011_R2` folder.

Customize Reflection Terminal Sessions

You can configure a variety of customizations for end users. Options include: preconfigured session documents with host connection information, custom configuration files (such as keyboard maps) that can be referenced by your session documents, and changes to the default look and feel of the Reflection Workspace.

Deploy session documents with host connection information

Settings for connecting to hosts from the Reflection Workspace are saved in session document files. Use these files to store connection information such as host name or IP address, port and terminal type. Different host types are identified by different file extensions. (The options available depend on which product you installed.)

File Extension	Terminal Type
rdox	VT, Linux console, XTERM, WYSE and others
rd3x	3270 terminal
rd5x	5250 terminal

For the basic procedure to deploy these files, see *Include Customized Configuration Files with the Installation* (page [12](#)).



Note: Additional files may be required if you configured secure connections. For a complete list of these files, see *Table 1. Where to Deploy Customized Files in the Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

Deploy customized Reflection configuration files

You can configure Reflection to use a variety of custom configuration files. These custom settings are saved in separate files that can be referenced by your session documents. Customizable options include:

- Keyboard maps
- Hotspots
- Mouse maps
- Themes

For the basic procedure for adding configuration files to your installation, see *Include Customized Configuration Files with the Installation* (page [12](#)).



For more detailed information see *Configure Reflection Sessions* in the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

Customize the Reflection Workspace

You can use the **Modify user settings** feature of Attachmate Customization Tool to change default settings that apply globally to the Reflection Workspace and all user documents. Features you can customize include:

- Trust Center settings (trusted location, information privacy, and macro security)
- User interface mode (ribbon, classic, or browser)
- Document arrangement (tabs or windows)
- Default data directory

For the basic procedure, see *Using Attachmate Customization Tool to Modify User Settings* (page [19](#)).



For more detailed information see *Customize Workspace Sessions* in the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

Control Startup Behavior

You can use either or both of the following approaches to control startup behavior.

Configure Workspace Startup Settings

You can use the **Modify user settings** feature of Attachmate Customization Tool to specify what actions occur when starting the workspace. Examples of available settings include:

- Specify which dialog box, if any, should appear.
- Configure a Startup action such as displaying help, launching an application, or running a macro.

For the basic procedure, see *Using Attachmate Customization Tool to Modify User Settings* (page [19](#)).



For more detailed information, see *Set up a Startup Action Sequence* in the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

Deploy Layout files

In the Reflection Workspace, the size, location, and arrangement of the workspace window, and any open terminal or web session documents can be saved to a layout file (*.rwsp). When opened, a layout automatically opens and arranges all documents saved to the layout, opens and positions any docked panes (such as Scratch Pad or Screen History), and connects session documents to configured hosts.

To deploy a Workspace layout:

- 1 Launch the workspace and configure your layout.
- 2 Use **File > Save Layout** to save your layout file.
- 3 Add the file to your installation as described in *Include Customized Configuration Files with the Installation* (page [12](#)).



For more detailed information, see *Create Layouts* in the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

Lock Down Workspace Settings

You can limit or restrict a user's ability to change configuration settings or to use a particular feature. (For example, you can prevent users from changing the host address that a session connects to.) To configure restricted access, use Group Policy, Permission Manager, or Permission Manager with the Attachmate Customization Tool.



For detailed information about these options, see *Restrict Access to Features and Settings* in the *Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

- **Permission Manager**

Use the Attachmate Permissions Manager tool to create `access` files that control access to features. Then create a companion installer package to deploy these files.

- **Attachmate Customization Tool with Permission Manager**

Use Attachmate Customization Tool with Permissions Manager to create `access` files that are automatically packaged in a companion installer package that you can deploy to users.

- **Group policy**

You can use Microsoft Group Policy to manage permissions. Reflection 2011 supports both ADM and ADMX formats. Group policy files are installed to a `Configuration` folder located in the program installation folder. The default location is:

```
C:\Program Files\Attachmate\Reflection\Configuration\GroupPolicy\
```


CHAPTER 6

Deploying Legacy Reflection X Sessions

In this Chapter

Deploy Settings for Connecting to Client Hosts	25
Control Startup Behavior	25
Lock Down Legacy Reflection X Features and Modify Default Settings	25

This chapter provides an overview of deployment and distribution methods that apply specifically to the legacy Reflection X server (14.1).

Deploy Settings for Connecting to Client Hosts

In Legacy Reflection X, settings for connecting to X Clients are saved to client files (*.rxc). You can use the Attachmate Customization Tool to add these files to your installation. For the basic procedure to deploy these files, see *Include Customized Configuration Files with the Installation* (page [12](#)).



Note: Additional files may be required if you configured custom Secure Shell connections, or want to include a list of known hosts. These files are installed to the Reflection documents folder and are also used by Reflection Workspace terminal sessions. For a complete list of these files, see *Table 1. Where to Deploy Customized Files in the Reflection 2011 Installation and Deployment Guide* (<http://docs.attachmate.com/reflection/2011/r2/deploy/deploymentguide.pdf>).

Control Startup Behavior

You can use **RunRX** command line utility to control Legacy Reflection X startup behavior. This executable (`runrx.exe`) is installed to the program folder.



For a description of parameters supported by **RunRx**, see *RunRX Utility* in the application Help.

Lock Down Legacy Reflection X Features and Modify Default Settings

System administrators can use the X Profiler to customize Reflection X. You can use it to set default values for settings and determine which settings can be modified by users. Profiled settings are stored in a profile file called `rx.ini`.

To modify settings using the X Profiler

- 1 Install **Reflection X (Legacy)** on your administrative workstation. Include the **Profiler** feature, which is not included by default.
- 2 Start the profiler. From the **Start** menu, go to **All Programs > Attachmate Reflection > Utilities > X Profiler**.

Note: On newer Windows systems that support User Account Control (UAC), you may see an error message. If this happens, modify the **X Profiler** shortcut as follows: Right-click and select **Properties**. On the **Compatibility** tab, select **Run this program as an administrator**.

- 3 Use the profiler tabs to modify your settings and save your changes to `rx.ini`.
- 4 Use a *companion install package* (page [12](#)) to add `rx.ini` to your Reflection installation to one of the following locations. At run-time, Reflection X looks for `rx.ini` in the following order of precedence:
 - The `\attachmate\reflection\x` subfolder in the user's personal Application Data folder.
 - The `\attachmate\reflection\x` subfolder in the common Application Data folder.
 - The Reflection program installation folder.