

# Parallels Remote Application Server

Parallels Client for OS X User's Guide

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# Getting Started

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# System Requirements

To install Parallels Client on your Mac, you need OS X Mountain Lion (version 10.8) or higher.

# Installing Parallels Client Using an Invitation Email

Your system administrator will send you an invitation email with the instructions on how to install Parallels Client for OS X and configure a Parallels Remote Application Server connection. The invitation email will contain the following information and action links:

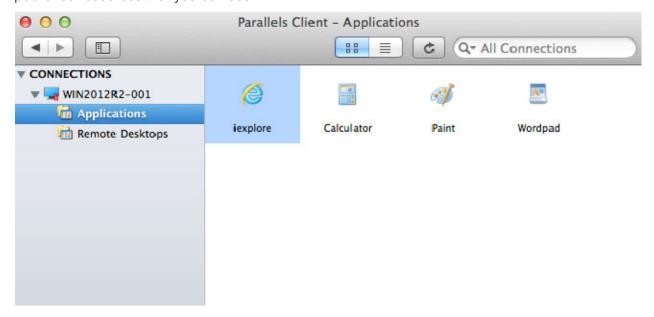
- A message from your system administrator.
- A link to download and install Parallels Client for OS X from the Mac App Store (links to Parallels Client for other platforms may also be included if you are using other devices in addition to a Mac computer).
- A link to automatically configure Parallels Client on your computer, so you can connect to Parallels Remote Application Server.
- Parallels Remote Application Server connection properties. You can use this information to manually create a Parallels Remote Application Server connection. The automatic configuration via the link (described above) is the preferred and the easiest method, but you can use this information to create a connection manually if needed for any reason.

To install Parallels Client for OS X using an invitation email:

- 1 In the invitation email, click the Apple thumbnail. This will open the Parallels Client for OS X page in the web browser.
- 2 Click the link to view the app in the Mac App Store and then click **Get** > **Install App**.
- **3** Follow the instructions and install the app on your Mac.

To automatically create a Parallels Remote Application Server connection:

- 1 In the invitation email that you received from your system administrator, find the **Configure** section and click the **Click Here to auto configure the downloaded client** link and follow the instructions.
- 2 Once the Parallels Client for OS X is configured, it will open and ask you to log into Parallels Remote Application Server.
- **3** Enter your credentials (e.g. your domain user name and password) and click **Login**.
- **4** If the login is successful, the main Parallels Client window will open and will display the published resources that you can use.



**Note:** If you haven't received an invitation email from your system administrator, but would still like to install Parallels Client on your Mac, you can visit the Mac App Store and search for the Parallels Client app. You can then install it like any other app on your Mac. For the information on how to manually configure a connection, please refer to **Adding a New Connection** section (p. 6).

# Using Parallels Client for Mac

# **In This Chapter**

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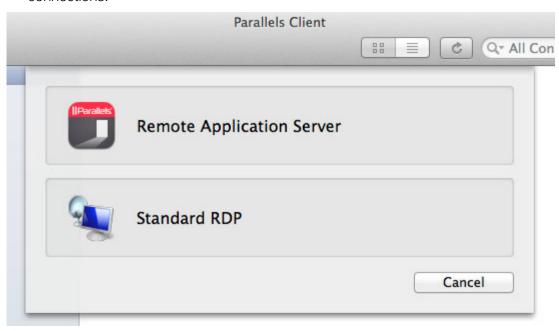
# Adding a New Connection

Parallels Client allows you to have more than one connection, so you could easily connect to different servers or using different connection properties, etc.

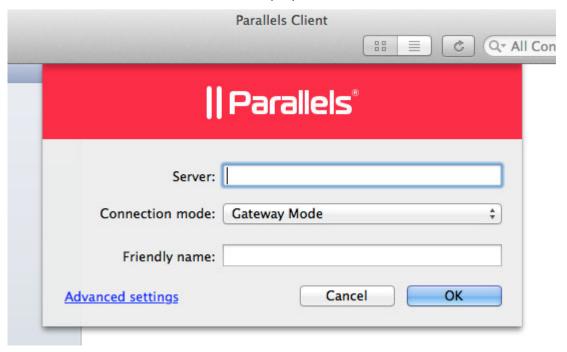
To manually add a connection:

- 1 From the main menu, click File > New Connection.
- **2** Select the type of connection to create:
  - Click **Remote Application Server** to create a Parallels Remote Application Server connection. This will allow you to use applications, documents, or desktops published in Parallels Remote Application Server.

Click Standard RDP to create a standard Remote Desktop connection. This will allow you
to connect to any remote computer desktop that accepts standard Remote Desktop
connections.



**3** On the next screen, enter the connection properties.



When creating a Remote Application Server connection, your system administrator should give you the connection information that must be specified in this dialog. If you received an invitation email from your administrator, you can find this information at the bottom of the message. The information will look similar to the following:

To manually configure the RAS Connection, use the following settings:

Server: 192.168.1.102

Port: 443

Connection Mode: Gateway SSL Mode

When creating a Standard RDP connection, you need to know the IP address or hostname of the remote computer you want to connect to.

- 4 In the **Server** field, enter the Parallels Remote Application Server IP address or hostname (this should be the server where the RAS Secure Client Gateway resides). If creating a Standard RDP connection, specify the remote computer IP address or hostname.
- **5** The **Connection mode** drop-down list is enabled only when creating a Remote Application Server connection. Select one of the following options:
  - Gateway Mode. Parallels Client connects to the RAS Secure Client Gateway and the session connection is tunneled through the first available connection. This mode is ideal for servers that are only reachable via the gateway and do not require a high level of security.
  - Gateway SSL Mode. Same as the gateway mode above, but uses encryption to secure the data.
  - **Direct Mode**. Parallels Client first connects to the RAS Secure Client Gateway for the best available terminal server and then connects directly to that server. This is best used when the Parallels Client and the terminal server reside on the same network.
  - Direct SSL Mode. Same as the direct mode above, but uses encryption to secure the data.
- 6 In the **Friendly name** field, choose and type a friendly name for this connection.
- 7 The Advanced settings link opens the Connection Properties dialog where you can specify additional connection properties. For more information, please see Configuring a RAS Connection (p. 8) or Configuring an RDP Connection (p. 18).
- 8 Click **OK** to create a connection.

# Configuring a RAS Connection

To modify a Parallels Remote Application Server connection properties, right-click it and choose **Connection Properties**. The following subsections describe the tabs that you can click to view and configure the groups of connection properties.

### Connection



#### **Configuring the Primary Connection**

On the **Connection** tab page, you can define a *primary connection* and one or more secondary connections.

The primary connection is established with the specified RAS Secure Client Gateway. To specify the primary connection information:

- 1 In the **Primary Connection** field, specify the server name or IP address.
- 2 In the Connection Mode drop-down menu, select one of the following options:
  - **Gateway Mode**. Parallels Client connects to the RAS Secure Client Gateway and the session connection is tunneled through the first available connection. This mode is ideal for servers which are only reachable via the gateway and do not require a high level of security.

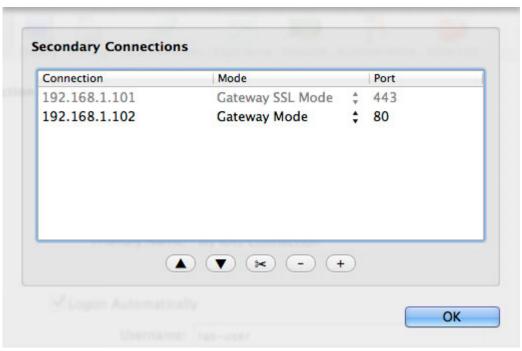
- Gateway SSL Mode. Same as the gateway mode above, but uses encryption to secure the data.
- **Direct Mode**. Parallels Client first connects to the RAS Secure Client Gateway for the best available terminal server and then connects directly to that particular server. This is best used when the Parallels Client and the terminal server are on the same network.
- **Direct SSL Mode**. Same as the direct mode above, but uses encryption to secure the data.
- 3 In the **Port** field, specify the port on which the gateway listens for incoming connections. If the default value (80) has been modified on the server side, you have to replace the default value here as well. Ask your system administrator about the port number if you are having a problem connecting to the server.
- 4 In the **Friendly Name** field, choose and type a name of your choice, so you could easily identify the server in Parallels Client later.

### **Configuring a Secondary Connection**

If the Remote Application Server that you are connecting to has more than one RAS Secure Client Gateway, you can define a secondary connection, which will be used as a backup connection in case the primary gateway connection fails.

To add a secondary connection:

1 Click the **Secondary Connections** button.



2 In the **Secondary Connections** dialog, click the **+** button and specify a server name or IP address. This should be a server hosting a secondary RAS Secure Client Gateway (the primary gateway is used by the primary connection).

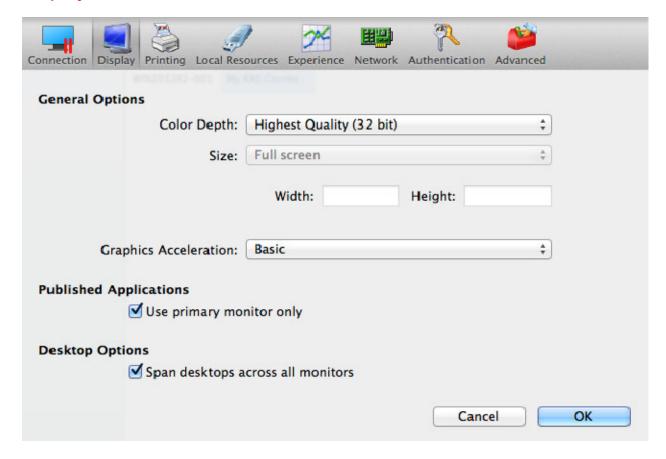
- **3** Select the connection mode and modify the port number if necessary.
- 4 If you have more than one secondary connection, you can move them up or down in the list. If the primary connection cannot be established, Parallels Client will use secondary connections in the order listed.
- 5 Click OK.

### **Configuring the Logon Information**

In the **Logon** section, specify the following properties:

- Select the **Logon Automatically** options to enable Parallels Client to connect automatically without displaying the **Logon** page every time you connect to a remote server.
- Enter your username, password, and domain information.

# Display



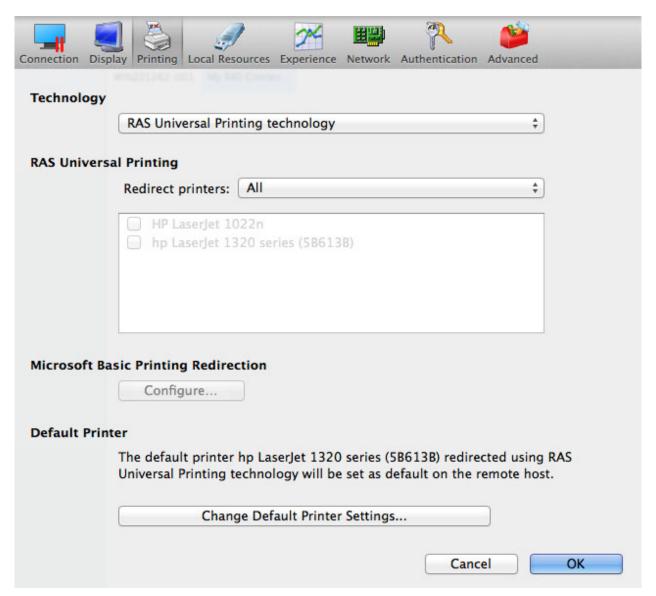
On the **Display** tab page, specify the following display options:

• In the **General Options** section, specify the general display properties (color depth, size, width and height).

- In the **Graphics Acceleration** drop-down menu, select the graphics acceleration type.
- Select the **Published Applications Use primary monitor only** option to use only the primary monitor connected to your Mac to display published applications.
- Select the Desktop Options Span desktops across all monitors option to span the published desktops across all connected monitors.

# **Printing**

The **Printing** tab page allows you to configure printing options.



### **Technology**

In the **Technology** drop-down menu, select the technology to use when redirecting printers to a remote computer:

- None. Printers will not be redirected.
- RAS Universal Printing technology. Select this option if you want to use RAS Universal Printing technology.
- Microsoft Basic Printing Redirection technology. Select this option if you want to use Microsoft Basic printing technology.
- RAS Universal Printing and Microsoft Basic redirection technologies. Select this option to use both Parallels RAS and Microsoft technologies.

#### **RAS Universal Printing**

If you selected **RAS Universal Printing technology**, select printers to redirect in the **Redirect Printers** drop-down menu:

- All. All printers on the client side will be redirected.
- **Default only**. Only your Mac's default printer will be redirected.
- **Specific only**. Select the printers to redirect in the provided list. The list becomes enabled for selection only if you select this option.

#### Microsoft Basic Printing Redirection

Click the **Configure** button (enabled if Microsoft Basic Printing is selected above) and configure the following options:

- **Select Destination**. Select a destination printer.
- **Driver**. Specify the printer driver to use.
- Open PDF in Preview. Opens a PDF document when previewing the material being printed.

### Default printer settings

To configure default printer settings, click the Change Default Printer settings button.

The default printer list shows the available printers that are ready to be redirected by the client to the remote computer. The list also includes the printing technology that the available printers will use. The technology reflects the setting selected, as described in the **Technology** section above. For example, if the technology was set to **RAS Universal Printing technology**, only the printers using RAS Universal Printing will be listed.

To disable the default printer, select **<none>**. To redirect the default local printer on the client side to the remote computer, select **<default local printer>**. When **<custom printer>** is selected, you can specify a custom printer on the remote computer if one exists. The first printer that matches the printer name inserted in the custom text box, will be set as the default printer on the remote computer.

Select **Match exact printer name** to match the name exactly as inserted in the custom text box. Please note that the remote printer name might differ from the original printer name. Also note that local printers might not be redirected due to server settings or policies.

#### Local Resources

Use the **Local Resources** tab page to configure how local resources are handled by the remote computer.



Use the **Remote Computer Sound** drop-down menu to specify whether the remote computer sound should be played on your local computer.

The **Local Devices** section allows you to specify the local disk drives to connect to automatically when logged on to the remote server. To specify the disk drives, select the **Disk drives** option, then click the **Configure** button and add the desired disk drives to the list.

The **Click this link to configure printers** link allows you to configure printer options. When you click the link, the following configuration options become available:

### **Technology**

Specifies the technology to use when redirecting printers to a remote computer:

- None. No printer redirection will be configured.
- RAS Universal Printing technology. Select this option if you want to use RAS Universal Printing technology.
- Microsoft Basic Printing Redirection technology. Select this option if you want to use Microsoft Basic printing technology.
- RAS Universal Printing and Microsoft Basic redirection technologies. Select this option to use both Parallels RAS and Microsoft technologies.

#### **RAS Universal Printing**

If you selected **RAS Universal Printing technology**, select printers to redirect in the **Redirect Printers** drop-down list:

- All. All printers on the client side will be redirected.
- **Default only**. Only the Windows default printer will be redirected.
- **Specific only**. Select the printers to redirect in the provided list. The list becomes enabled for selection only if you select this option.

#### Microsoft Basic Printing Redirection

If you selected **Microsoft Basic Printing Redirection technology**, click the Configure button and specify the following options:

- Select Destinations. Select all or a specific destination printer.
- Driver. Select a printer driver to use.
- Open PDF in Preview. If selected, PDF documents can be opened in Preview before printing.

#### **Default printer settings**

To configure default printer settings, click the **Change Default Printer settings** button.

The default printer list shows the available printers that are ready to be redirected by the client to the remote computer. The list also includes the printing technology that the available printers will use. The technology reflects the setting selected, as described in the **Technology** section. For example, if the technology was set to **RAS Universal Printing technology**, only the printers using RAS Universal Printing will be listed.

To disable the default printer, select **<none>**. To redirect the default local printer on the client side to the remote computer, select **<defaultlocalprinter>**. When **<custom printer>** is selected, you can specify a custom printer which might be installed on the remote computer. The first printer that matches the printer name inserted in the custom text box, will be set as the default printer on the remote computer.

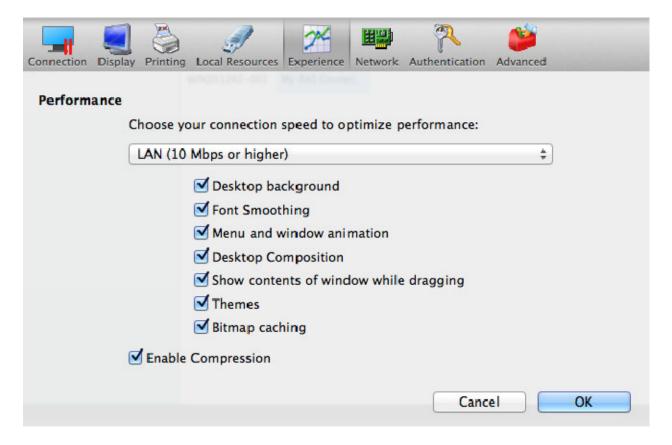
Select **Match exact printer name** to match the name exactly as inserted in the custom text box. Please note that the remote printer name might differ from the original printer name. Also note that local printers might not be redirected due to server settings or policies.

You can specify the time a printer will be forced as default. If the default printer is changed during this time after the connection is established, the printer is reset as default.

Select the **Update the remote default printer if the local default printer is changed** option to change the remote default printer automatically when the local default printer is changed. Please note that the new printer must have been previously redirected.

# Experience

The **Experience** tab page allows you to tweak the connection speed to optimize the performance of the connection with the remote host.



If you are connecting to a remote computer on a local network that runs at 100 Mbps or higher, it is usually safe to have all of the experience options turned on. It is also recommended to enable compression to have a more efficient connection.

### Network

Use the **Network** tab page to configure a proxy server if you have to use one to connect to Parallels Remote Application Server.

To configure a proxy server, select the **Use proxy server** option and then select the protocol from the following list:

- SOCKS4. Enable this option to transparently use the service of a network firewall.
- **SOCKS4A**. Enable this option to allow a client that cannot connect to resolve the destination host's name to specify it.
- **SOCKS5**. Enable this option to be able to connect using authentication.
- HTTP 1.1. Enable this option to connect using the standard HTTP 1.1 protocol connections.

Specify the proxy host domain name or IP address and the port number.

For SOCKS5 and HTTP 1.1 protocols, select **Proxy requires authentication** and enter user credentials.

### **Authentication**

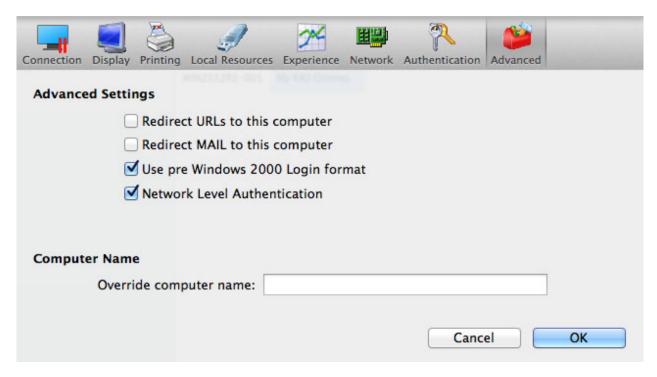
Use the **Authentication** tab page to specify what happens if Network Level Authentication fails.

In the If authentication fails drop-down menu, select one of the following options:

- **Connect**. The user can ignore the certificate of the server and still connect.
- Warn. The user is alerted about the certificate and still has the ability to choose whether to connect or not.
- Do not connect. The user is not allowed to connect.

### Advanced

The Advanced **Settings** tab page allows you to customize the default behavior or Parallels Client.



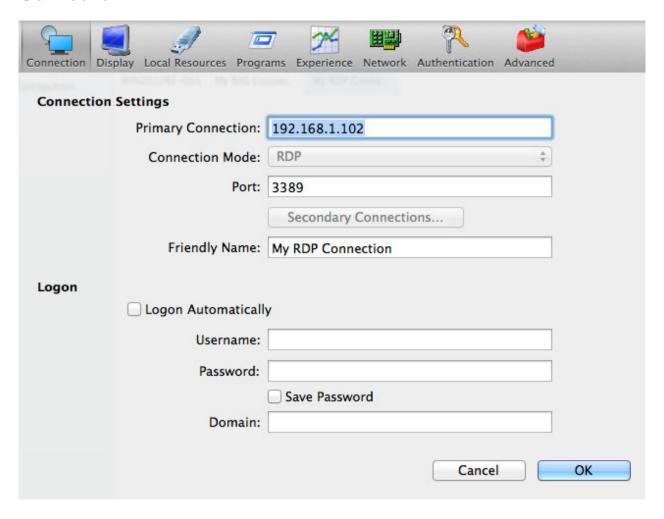
You can specify the following properties:

- Redirect URLs to this computer. Enable this option to use the local web browser when opening 'http:" links.
- Redirect Mail to this computer. Enable this option to use the local mail client when opening 'mailto:' links.
- Use Pre Windows 2000 login format. If this option is selected, it allows you to use legacy (pre-Windows 2000) login format.
- **Network Level Authentication**. Check this option to enable network level authentication, which will require the client to authenticate before connecting to the server.
- Override computer name. Specifies the name that your computer will use during a remote desktop session. If set, this will override the default computer name. Any filtering set by the administrator on the server side will make use of the name specified here.

# Configuring an RDP Connection

To modify a standard RDP connection properties, right-click it and choose **Connection Properties**. This opens the connection properties dialog. The following subsections describe the tabs that you can click to view and configure the groups of RDP connection properties.

### Connection



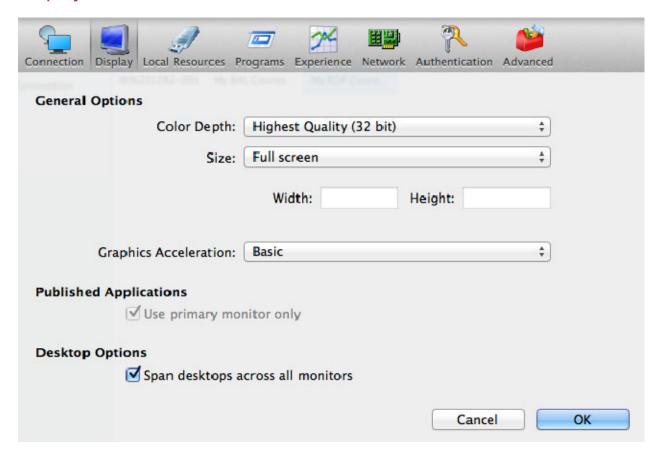
To specify the connection information:

- 1 In the **Primary Connection** field, specify the remote computer host name or IP address.
- 2 The **Port** field contains the TCP port 3389 by default, which is the standard port for RDP connections. You can modify it if the port number was changed on the remote computer.
- 3 In the **Friendly Name** field, choose and type a name of your choice, so you could easily identify the server in Parallels Client later.

In the **Logon** section, specify the following properties:

- Select the **Logon Automatically** options to enable Parallels Client to connect automatically without displaying the **Logon** dialog every time you connect to a remote server.
- Enter your username, password, and, if necessary, domain information.

# Display



On the **Display** tab page, specify the following display options:

- In the **General Options** section, specify the general display properties, such as color depth and screen size. To specify a custom screen size, select Custom in the drop-down list and then specify the width and height in the fields provided.
- In the Graphics Acceleration drop-down menu, select the graphics acceleration type.
- Select the **Published Applications Use primary monitor only** option to use only the primary monitor connected to your Mac to display published applications. If you have more than one monitor and the option is cleared, all monitors will be used to display the applications.
- Select the Desktop Options Span desktops across all monitors option to span the
  published desktops across all connected monitors (if you have more than one monitor
  connected to your Mac).

### Local Resources

Use the **Local Resources** tab page to configure how local resources are handled by the remote computer.



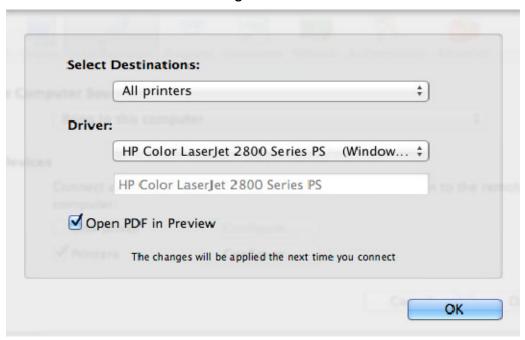
Use the **Remote Computer Sound** drop-down menu to specify whether the remote computer sound should be played on your local computer.

In **Local Devices** section, specify the local devices to automatically connect to when logged on to the remote server:

To specify local disk drives, select the **Disk drives** option, then click the **Configure** button, and then add the desired disk drives to the list.

To specify local printers:

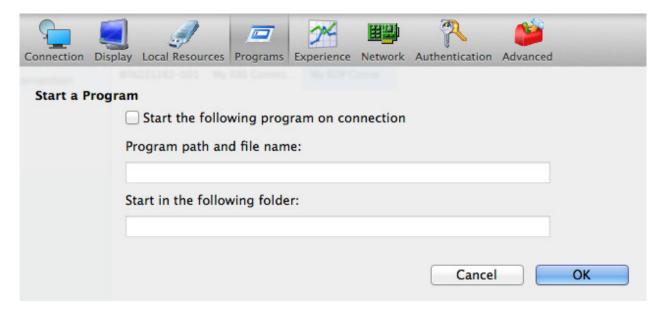
1 Select **Printers** and then click **Configure**.



- 2 In the **Select Destinations** drop down list, specify **All printers** or a specific printer.
- 3 In the Driver drop-down list, select the printer driver to use.
- **4** Select the **Open PDF in Preview** option to be able to open PDF documents in Preview before printing.

# **Programs**

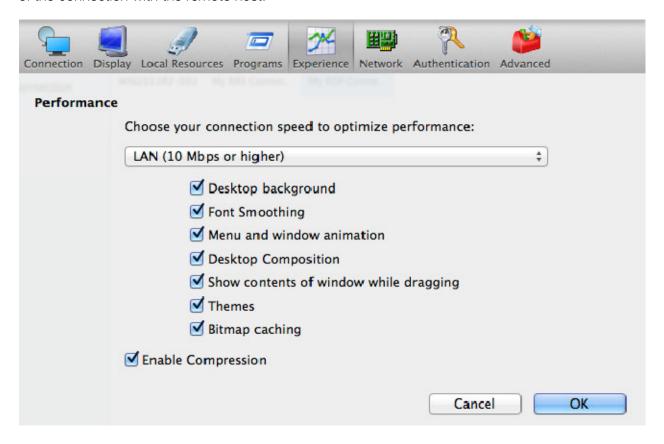
On the **Program** tab page, you can specify a program to start automatically on the remote computer when you establish a Remote Desktop connection with it.



Select the **Start the following program on connection option**, then specify the program path and file name, and the start-in folder, if needed.

# Experience

The **Experience** tab page allows you to tweak the connection speed to optimize the performance of the connection with the remote host.



If you are connecting to a remote computer on a local network that runs at 100 Mbps or higher, it is usually safe to have all of the experience options turned on. It is also recommended to enable compression to have a more efficient connection.

### **Network**

Use the **Network** tab page to configure a proxy server if you have to use one to connect to a remote computer.

To configure a proxy server, select the **Use proxy server** option and then select the protocol from the following list:

- SOCKS4. Enable this option to transparently use the service of a network firewall.
- **SOCKS4A**. Enable this option to allow a client that cannot connect to resolve the destination host's name to specify it.
- SOCKS5. Enable this option to be able to connect using authentication.

• HTTP 1.1. Enable this option to connect using the standard HTTP 1.1 protocol connections.

Specify the proxy host domain name or IP address and the port number.

For SOCKS5 and HTTP 1.1 protocols, select **Proxy requires authentication** and enter the credentials.

### **Authentication**

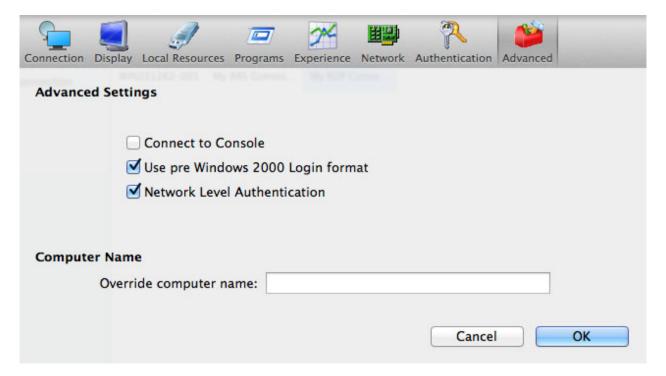
Use the **Authentication** tab page to specify what happens if Network Level Authentication fails.

In the If authentication fails drop-down menu, select one of the following options:

- Connect. The user can ignore the certificate of the server and still connect.
- Warn. The user is alerted about the certificate and still has the ability to choose whether to connect or not.
- Do not connect. The user is not allowed to connect.

## Advanced

The Advanced **Settings** tab page allows you to customize the default behavior or Parallels Client.



You can specify the following properties:

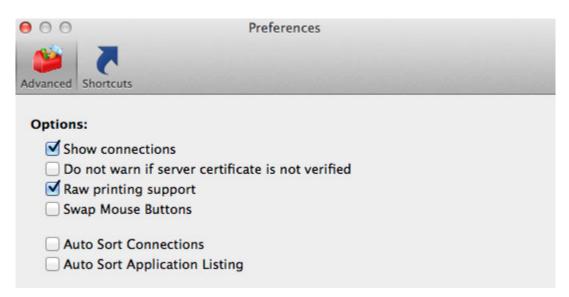
- Connect to Console. This option is used for administration of a Remote Desktop Session Host server. It acts as if a standard Remote Desktop connection is initiated from the command line with the /admin option.
- Use Pre Windows 2000 login format. If this option is selected, it allows you to use legacy (pre-Windows 2000) login format.
- **Network Level Authentication**. Check this option to enable network level authentication, which will require the client to authenticate before connecting to the server.

**Override computer name**. Specifies the name that your computer will use during a remote desktop session. If set, this will override the default computer name. Any filtering set by the administrator on the server side will make use of the name specified here.

# Modifying Parallels Client Preferences

To modify Parallels Client preferences, click **Parallels Client** > **Preferences** from the main menu.

#### Advanced

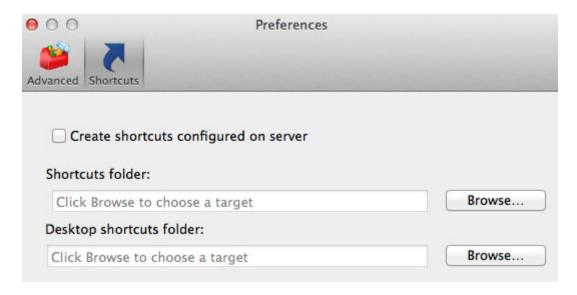


On the **Advanced** tab page, specify the following options:

- Show connections. Shows or hides the Connections list (left pane in the main window).
- Do not warn if server certificate is not verified. When connected over SSL, and the certificate is not verified, a warning message will be displayed. You can disable this warning message by enabling this option.
- Raw printing support. When enabling this setting, printing will still work for applications sending data in RAW format.

- **Swap Mouse Buttons**. When enabling this setting, the mouse buttons will be swapped on the remote computer.
- Auto Sort Connections. Sort the Connections list automatically (e.g. when a new connection is added to it).
- Auto Sort Application Listing. Sort the Published Applications list automatically.

#### **Shortcuts**



On the **Shortcuts** tab page, specify the following options:

- Create shortcuts configured on server. For each published application, the administrator can
  configure shortcuts that can be created on the client's desktop. Select this option to create the
  shortcuts, or clear the option if you don't want to create them.
- Shortcuts folder. Specifies the target shortcut folder (e.g. /Applications)
- **Desktop shortcuts folder**. Specifies the desktop shortcut folder (e.g. /Users/username/Desktop).

# Using a RAS Connection

To connect to Parallels Remote Application Server, double-click a connection in the **Connections** list (or right-click > **Connect**).

You can have multiple active connections at the same time (both Remote Application Server and standard RDP). To switch between active connections in Parallels Client, click a connection in the left pane.

Every time you connect to a remote server from Parallels Client, a session is created for the connection. To manage a session, select a connection in the **Connections** list and then click the **Session** menu.

The **Session** menu has the following options allowing you to perform session management tasks:

- Log Off. Logs off Parallels Client from the session.
- **Disconnect**. Disconnects from the remote server.
- Send Ctrl+Alt+Del. Sends a Ctr-Alt-Del key combination to the remote computer.
- **Session Information**. Displays the session information.

To disconnect all active RAS connections (not just the current one), click the **File** on the main menu and then click **Disconnection All RDP Connections**.

To log off all RAS Connections, click File > Log Off All RAS Connections.

# Using an RDP Connection

After adding a Standard Remote Desktop connection, double-click it (or right-click > **Connect**) to establish a connection with the remote computer.

You can have multiple active connections at the same time (both standard RDP and Remote Application Server). To switch between active connections in Parallels Client, click a connection in the left pane.

Every time you connect to a remote server from Parallels Client, a session is created for the connection. To manage a session, select a connection in the **Connections** list and then click the **Session** menu.

The **Session** menu has the following options allowing you to perform session management tasks:

- Log Off. Logs off Parallels Client from the session.
- **Disconnect**. Disconnects from the remote server.
- Send Ctrl+Alt+Del. Sends a Ctr-Alt-Del key combination to the remote computer.
- **Session Information**. Displays the session information.

To disconnect all active RDP connections (not just the current one), click **File** on the main menu and then click **Disconnection All RDP Connections**.

# Exporting and Importing Parallels Client Settings

You can export current Parallels Client settings to a file to have a backup or to import the settings into a Parallels Client installed on a different computer. The following settings are exported:

- All existing connections including all individual connection properties.
- Parallels Client preferences.

To export the current Parallels Client settings to a file, click **File** on the main menu and then click **Export Settings**. In the dialog that opens, specify a file name and a destination folder. Click **Save** to export the settings. The file is saved with the ".2xc" extension.

To import the settings, click **File** > **Import Settings**. In the dialog that opens, select the ".2xc" file and click **Open**. Please note that the Parallels Client settings stored in a file will override the current Parallels Client settings.

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