Parallels® Plesk Panel

Parallels Panel 9.5 Migration Guide

Revision 1.0

Parallels™

Contents

Preface

In this section:

About This Document

This guide provides essential information on migrating hosting data to Parallels Plesk Panel 9.5 from servers running Plesk: Parallels Plesk Panel 9.5 and earlier versions of this control panel.

Typographical Conventions

Before you start using this guide, it is important to understand the documentation conventions used in it.

The following kinds of formatting in the text identify special information.

Formatting convention	Type of Information	Example
Special Bold	Items you must select, such as menu options, command buttons, or items in a list.	Go to the **System** tab.
	Titles of chapters, sections, and subsections.	Read the **Basic Administration** chapter.
Italics	Used to emphasize the importance of a point, to introduce a term or to designate a command line placeholder, which is to be replaced with a real name or value.	The system supports the so called *wildcard character* search.
`Monospace`	The names of commands, files, and directories.	The license file is located in the `http://docs/common/licenses` directory.

Formatting convention	Type of Information	Example
`Preformatted`	On-screen computer output in your command-line sessions; source code in XML, C++, or other programming languages.	**`# ls –al /files`** `total 14470`
`Preformatted Bold`	What you type, contrasted with on-screen computer output.	**`# cd /root/rpms/php`**
CAPITALS	Names of keys on the keyboard.	SHIFT, CTRL, ALT
KEY+KEY	Key combinations for which the user must press and hold down one key and then press another.	CTRL+P, ALT+F4

Feedback

If you have found an error in this guide, or if you have suggestions or ideas on how to improve this guide, please send your feedback using the online form at http://www.parallels.com/en/support/usersdoc/. Please include in your report the guide's title, chapter and section titles, and the fragment of text in which you have found an error.

CHAPTER 1

Introduction

Migration is a process of transferring hosting data from one server (called *source server*) to another (called *destination, or target server)*.

Supported Migrations from Parallels Plesk Panel servers

Source	Destination
Plesk for Unix v. 6.0 and later	Linux/Unix-based Parallels Plesk Panel 9.3 or later
Plesk for Unix v. 6.0 and later	Windows-based Parallels Plesk Panel 9.3 or later
Plesk for Windows v. 7.5.6 and later	Windows-based Parallels Plesk Panel 9.3 or later

Supported Migrations from Other Hosting Platforms

Source	Destination
cPanel for Unix, versions 9, 10, 11 Domains data	Linux/Unix-based Parallels Plesk Panel 9.2.1 or later

Note: For details on the migrations from other hosting platforms, refer to the appendixes included in this document.

Migration Means

Parallels Plesk Panel offers the following opportunities to perform a migration:

1. Migration Manager
2. Backup/Restore Utilities

Comparative characteristics of these migration means are presented in the following table.

Parameter	Migration Manager	Backup/Restore Utilities
Type of migration	automated (manual troubleshooting is possible)	manual

Parameter	Migration Manager	Backup/Restore Utilities
Method of operating	▪ using Web interface (**Home** > **Migration Manager** (in the **Help & Support** group)) ▪ using API RPC protocol (the **migration** operator)	▪ using command line utilities ▪ mixed: using command line and Web interface
Data migrated	limited to reseller, client and domain accounts	complete server data, including server-wide settings and content (e.g., SSL certificates from admin's repository)
Availability	not included in typical PPP installation	always available
Migrations from other hosting platforms	supported	not supported

Important Note: Regardless of the selected means, it is required for a successful migration that all necessary third-party components are installed and correctly configured on the target server.
For example, if a migrated domain has MySQL databases, and some mailing lists, target server must have a connection to at least one MySQL server configured and established, and the Mailman software must be installed and properly configured.

CHAPTER 2

Performing Automated Migrations Using Migration Manager

This chapter contains information sufficient for performing automated migrations using PPP graphical user interface.

For information on migration-specific operations in Plesk API, refer to the **API RPC Reference** document available at PPP Developer Documentation section (http://www.parallels.com/ptn/documentation/ppp/) of Parallels Technology Network.

Installing Migration Manager section (on page 8) references instructions on this PPP component installation.

Preliminary Windows-Specific Operations section (on page 8) explains all actions that PPP administrator should perform to ensure successful migration from Windows-based platforms. This includes:

- fine tuning firewall and Windows configuration
- fine-tuning other relevant configurations

Performing Migration section (on page 23) provides detailed instructions on how to perform a particular migration task.

Troubleshooting section (on page 25) describes the ways of how to complete a migration carried out by Migration Manager and failed at some intermediate stage of the process.

In this chapter:

Installing Migration Manager

Migration Manager is a Parallels Plesk Panel component not included in PPP typical installation. Therefore, to be able to perform migrations, you should either install PPP with this component or, in case PPP is already installed without Migration manager, update the installation with this component.

For detailed instructions, refer to the **Installation Guide** of proper PPP version and platform, located at PPP Documentation Page (http://www.parallels.com/products/plesk/docs).

Preliminary Windows-Specific Operations

This section contains information relevant to performing the following migrations:

1. to or from Parallels Plesk Panel for Windows
2. from Windows-based hosting platforms other than PPP

In this section:

Configuring Firewall and Windows to Enable Migration

If a source or destination Windows server is behind a firewall, you need to properly configure the firewall to allow the migration data exchange.

The following conditions must be observed:

- Ports (with specific protocols enabled) required by SAMBA and PPP Migration Manager are opened.
- The *Client for Microsoft Networks* and the *File and Printer Sharing for Microsoft Networks* Windows applications are installed.
- The *Workstation* service must be running on destination server.
- The *Server* service must be running on source server.
- Administrative shares (admin$, c$, d$) must exist on the source server.

In this section:

Opening ports for SAMBA, SSH and Migration Manager

When you are migrating from Linux/UNIX-based servers, Migration Manager uses SSH for network connections. For migration from a Windows-based server, Migration Manager uses SAMBA. SSH, SAMBA, and Migration Manager require certain ports to be opened to enable proper network connectivity for migration.

Specifically, the following ports must be open and the data exchange protocols enabled on the ports.

Software	Port	Protocol
SAMBA	135	TCP
	139	TCP
	445	TCP
	137	UDP
	138	UDP
PPP Migration Manager	6489 (or other)	TCP
SHH	22 (or other)	TCP

Checking if the Client for Microsoft Networks and the File and Printer Sharing for Microsoft Networks Windows applications are installed

➢ ***To verify that the software packages are installed, follow these steps:***

1. Open the **Local Area Connection** window:
   a. Click **Start.**
   b. Select **Control Panel** > **Network Connections** > **Local Area Connection**).
   The **Local Area Connection Status** window opens.
2. Select the the **General** tab and click the **Properties** button.
   The **Local Area Connection Properties** window opens.
3. Under **This connection uses the following items**, check that the *Client for Microsoft Networks* and the *File and Printer Sharing for Microsoft Networks* applications are listed and make sure that the corresponding check boxes on the left are selected.
4. Click **OK**.

Installing Client for Microsoft Networks

To install Client for Microsoft Networks:

1. Open the **Local Area Connection** window:
   a. Click **Start.**
   b. Select **Control Panel** > **Network Connections** > **Local Area Connection**).
   The **Local Area Connection Status** window opens.
2. Select the the **General** tab and click **Properties**.
   The **Local Area Connection Properties** window opens.
3. Click **Install**.
   The **Select Network Component Type** window opens.
4. Under **Click the type of network component you want to install**, click **Client**.
   The **Select Network Client** window opens.
5. In the list of network clients, select **Client for Microsoft Networks** and click **OK**.
   Once the application is installed, the **Client for Microsoft Networks** item appears in the **Local Area Connection Properties** window, under **This connection uses the following items**.
6. Select **Client for Microsoft Networks**.

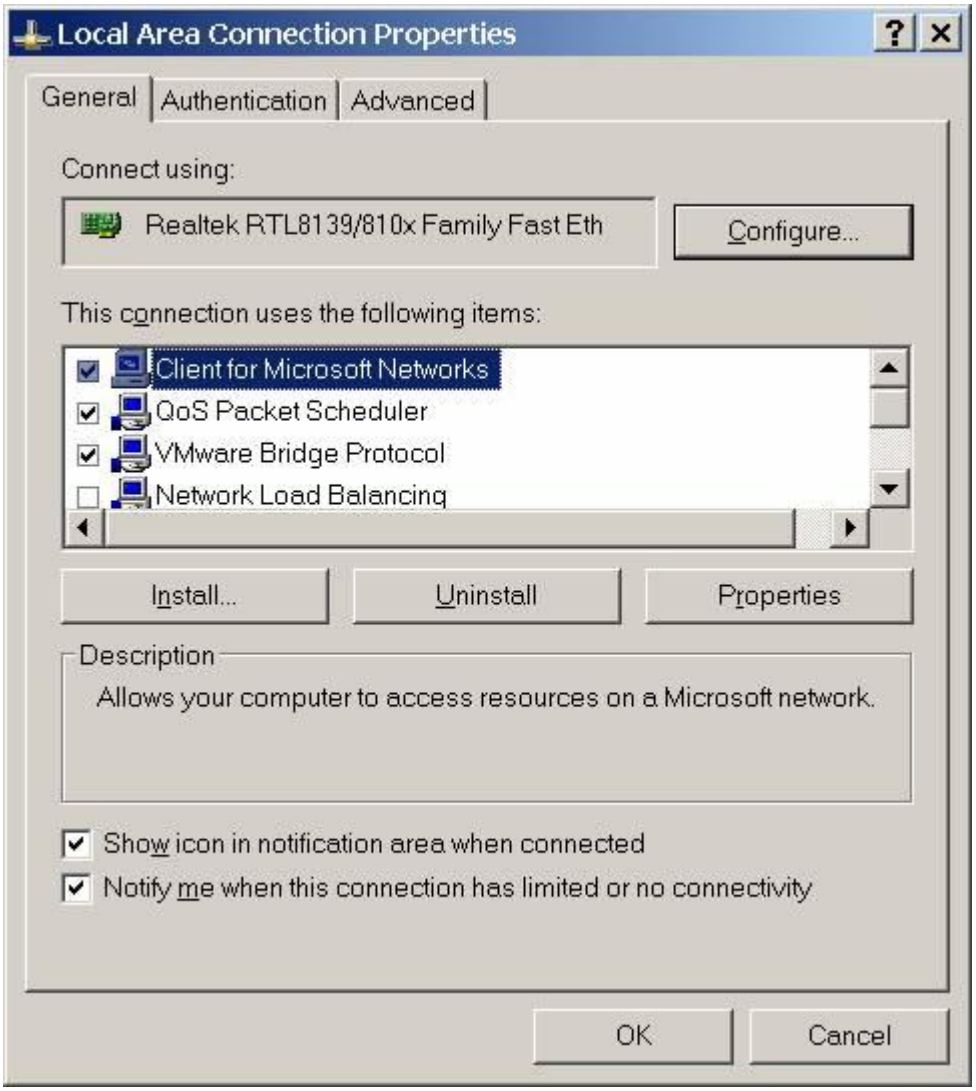

Figure 1: Installing Client for Microsoft Networks

7. Click **OK**.

Note: You must restart Windows for the configuration changes to take effect.

Installing File and Printer Sharing for Microsoft Networks

➢ ***To install File and Printer Sharing for Microsoft Networks:***

1. Open the **Local Area Connection** window:
   a. Click **Start.**
   b. Select **Control Panel** > **Network Connections** > **Local Area Connection**).
   The **Local Area Connection Status** window opens.
2. Select the the **General** tab and click **Properties**.
   The **Local Area Connection Properties** window opens.
3. Click **Install**.
4. The **Select Network Component Type** window opens.
5. Under **Click the type of network component you want to install**, click **Service**.
   The **Select Network Service** window opens.
6. In the list of network clients, select **File and Printer Sharing for Microsoft Networks** and click **OK**.
   Once the application is installed, the **File and Printer Sharing for Microsoft Networks** item appears in the **Local Area Connection Properties** window, under T**his connection uses the following items**.
7. Select **File and Printer Sharing for Microsoft Networks** by using the corresponding check box on the left.
8. Click **OK**.

Note: You must restart Windows for the configuration changes to take effect.

Preparing for Migration from Windows-based Platforms

Automatic migrations of hosting data from one Windows server to another is possible in case a specific connection is established between the servers. The connection is established by Migration Manager installed on destination server and Migration Agent utility - on source server, provided that they are configured identically.

Migration Agent is a utility which, by demand from Migration Manager on destination server, collects the required hosting data, creates dump, converts it to the PPP format (in case ot migrating from non-PPP hosting platform), and passes it to the destination server. Migration Agent is distributed separately from PPP, and should be additionally installed on every Windows-based source server.

The configuration of 'Migration Manager - Migration Agent' connection is as follows:

- *Port* - number of the port that is used by PPP for connecting to Migration Agent. (Default is 6489.)

  When changing the port, consider the following:

  - It can be any number from 1 to 65535.
  - It must be free on server from which data will be migrated, that is, this port should not be used by any other programs or services on both servers.
  - It must be allowed by firewall on source server.
- *Migration Agent URI* - name of the system object used by PPP for calling Migration Agent. (Default is "WinAgentURI".)

  When changing Migration Agent URI, consider the following

  - It can contain only numbers, and latin letters of upper and/or lower case.
  - It should not be used by another application on source server.
- *Channel type* - protocol of Migration Manager and Migration Agent connection. (Default is HTTP.)

  When selecting the channel type, consider the following characteristics:

  - TCP provides better performance than HTTP
  - HTTP is more public as it uses HTTP protocol, which is allowed by most of firewalls.

Note: If these connection parameters are not the same in Migration Manager and Migration Agent configurations, migrations will fail.

In this section:

Installing and Configuring Migration Agent on Source Server

In this section:

Installing Migration Agent

➢ ***To install Migration Agent:***

1. Download Migration Agent installation file using download link published at http://www.parallels.com/download/plesk/utilities/.
2. Run the installation file and follow the installation wizard instructions:
   a. When the first screen of the installation wizard appears, click **Next>**.

      This starts the Plesk Migration Agent installation, it is installed to the `C:\Program Files\Parallels\Plesk Migrator Agent\` directory.

   b. Click **Finish** after the installation wizard installs Migration Agent files to your server.

Once you have installed Migration Agent, it starts automatically with the default settings.

Configuring Migration Agent

Changing Migration Agent configuration includes the following:

- Changing parameters of the Migration Agent connection with Migration Manager (port, Migration Agent URI and channel type).

  This can be done using either Migration Agent interface or Migration Agent configuration file.
- Changing location of migration dumps on source server.

  This is necessary if, for example, there is not enough disk space on the disk where Migration Agent is installed.

➢ *To change the connection parameters using Migration Agent GUI:*

1. Run the `WINAgentMng.exe` file.

   The Migration Agent window opens.

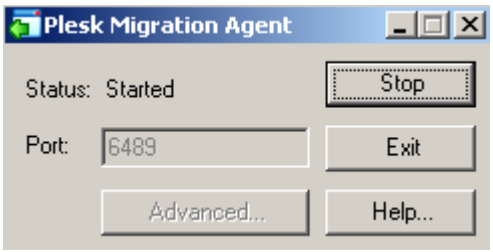

Figure 2: Plesk Migration Agent window

   If Migration Agent was installed in the default location, you can access it by clicking **Start** > **Programs** > **Parallels** > **Plesk** > **Plesk Migration Agent**, or browsing to `C:\Program Files\Parallels\Plesk Migration Agent\WINAgentMng.exe`.

2. Click **Stop**.

   This makes changing Migration Agent settings available.

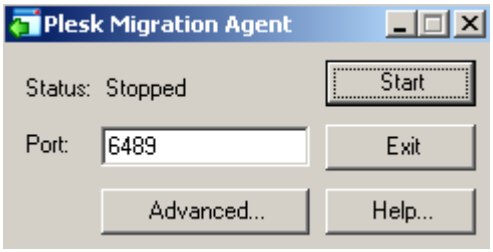

Figure 3: Plesk Migration Agent stopped: changing settings is available

3. Enter the desirable value next to **Port** to change the port number.
4. To change Migration Agent URI and channel type:

   a. Click **Advanced**.

   The advanced options window opens.

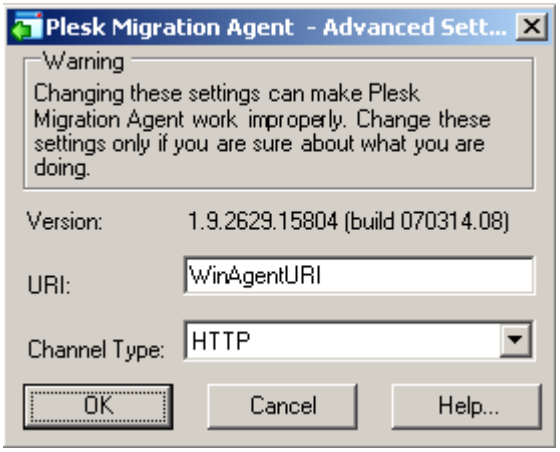

Figure 4: Plesk Migration Agent: advanced options

b. Enter desirable name next to **URI** to change Migration Agent URI, .

c. Select an appropriate item in the **Channel Type** menu to set up a channel type.

d. Click **OK**.

This applies the changes made to advanced options and closes the advanced options window.

5. Click **Start**.

This applies changes made to the port number and starts Migration Agent with new settings.

Editing Migration Agent Configuration File

You can edit the Migration Agent configuration settings manually. For the changes to take effect after manual editing, restart Migration Agent.

➢ ***To change the connection parameters by editing configuration file:***

1. Open for editing the `<migration-agent-installation-directory>\WINAgentMng.exe.config` file and locate the `"/configuration/appSettings"` element.

By default, Migration Agent is installed in `C:\Program Files\Parallels\PleskMigrationAgent`.

Warning: It is strongly recommended that you do not change anything beyond the contents of the `<appSettings>` node, as doing this will most probably crash PPP Migration Manager and make migrations impossible.

2. To change port number, enter a desired value in the `<add key="Port" value="6489" />` string instead of `6489`.

For example, if you want port 7788 to be used, this string should be `<add key="Port" value="7788" />`.

3. To change Migration Agent URI, enter a desired value in the `<add key="ObjectUri" value="WinAgentURI" />` string instead of `WinAgentURI`.

   For example, if you want "MigrationAgent325" to be used as the Migration URI, this string should be `<add key="ObjectUri" value="MigrationAgent325" />`.

4. To change channel type, enter a desired value in the `<add key="ChannelType" value="HTTP" />` instead of `HTTP`.

   For example, if you want to use TCP, this string should be `<add key="ChannelType" value="TCP" />`.

5. To change the Migration Agent's IP address, enter the IP address value in the string `<add key="IPAddress" value="" />`.

   This will enable PPP Migration Manager to connect to Migration Agent through the specified IP address only. Type `0.0.0.0` or remove the string from the file altogether to enable PPP Migration Manager to connect to Migration Agent through any IP address available on the source server.

6. Save file.

7. Restart Migration Agent.

➢ ***To change dumps location:***

1. Open for editing the *<migration-agent-installation-directory>*`\WINAgentMng.exe.config` file and locate the `"/configuration/appSettings"` element.

   By default, Migration Agent is installed in `C:\Program Files\Parallels\PleskMigrationAgent`.

   Warning: It is strongly recommended that you do not change anything beyond the contents of the `<appSettings>` node, as doing this will most probably crash PPP Migration Manager and make migrations impossible.

2. Add the full path (starting with the drive root) to folder where the file should be stored into the `<add key="DumpDirectory" value="" />` string.

   For example, if you want the migration dump to be stored in folder `H:\Store\Plesk_migration`, this string should be `<add key="DumpDirectory" value="H:\Store\Plesk_migration" />`. If such directory does not exist on disk H, it will be created.

3. Save file.

4. Restart Migration Agent.

Default content of the configuration file

```
<?xml version=”1.0” encoding=”utf-8”?>
<configuration>
  <startup>
     <supportedRuntime version=”v2.0.50727” />
     <supportedRuntime version=”v1.1.4322” />
  </startup>
  <system.runtime.remoting>
     <customErrors mode=”off” />
     <application name=”Parallels Foreign Migration Agent” />
  </system.runtime.remoting>
  <runtime>
     <assemblyBinding xmlns=”urn:schemas-microsoft-com:asm.v1”>
     <probing privatePath=”BackupUtils” />
     </assemblyBinding>
  </runtime>
  <appSettings>
      <add key=”Port” value=”6489” />
      <add key=”ObjectUri” value=”WinAgentURI” />
      <add key=”ChannelType” value=”HTTP” />
      <add key=”IPAddress” value=”” />
      <add key=”DumpDirectory” value=”” />
      <add key=”UseWebserver” value=”false” />
      <add key=”WebServerPort” value=”6490” />
      <add key=”LogUseDefaultCulture” value=”false” />
  </appSettings>
</configuration>
```

Configuring Migration Manager on Destination Server

Changing parameters of Migration Manager connection to Migration Agent must be performed only in case the same changes are done to the Migration Agent configuration.

➢ ***To change parameters of Migration Manager connection to Migration Agent:***

1. Open for editing the `%plesk_dir%\PMM\Migration\migrmng.exe.config` file and locate the "`/configuration/appSettings`" element.

   `%plesk_dir%` is the system variable defining the folder where PPP is installed.

2. To change the port number, enter the required value in the string `<add key="Port" value="6489" />` instead of `6489`.

   For example, if you want port 7788 to be used, this string should be `<add key="Port" value="7788" />`.

3. To change Migration Agent URI, enter the required value in the string `<add key="ObjectUri" value="WinAgentURI" />` instead of `WinAgentURI`.

   For example, if you want "MigrationAgent325" to be used as the Migration URI, the string should be `<add key="ObjectUri" value="MigrationAgent325" />`.

4. To change channel type, enter the required value in the string `<add key="ChannelType" value="HTTP" />` instead of `HTTP`.

   For example, if you want to use TCP, this string should be `<add key="ChannelType" value="TCP" />`.

5. Save the file.

Default content of migrmng.exe.config

```
<?xml version="1.0" encoding="utf-8" ?>
<configuration>
  <configSections>
  <section name="Platforms"
type="ForeignMigratorEngineCore.Configuration.PlatformsSectionHa
ndler,ForeignMigratorEngineCore"/>
  </configSections>
  <startup>
    <supportedRuntime version = "v2.0.50727" />
    <supportedRuntime version = "v1.1.4322" />
```

```
  </startup>
```

<!-- These are the settings you may reconfigure -->

<appSettings>

```
    <add key=”Port” value=”6489” />
    <add key=”ObjectUri” value=”WinAgentURI” />
    <add key=”ChannelType” value=”HTTP” />
  <!-- The Dump location and file name defined in PPP GUI
override settings in this configuration file -->
    <add key=”DumpDirectory” value=”” />
    <add key=”DumpName” value=”” />
    <add key=”UnixDumpDirectory” value=”/usr/local” />
    <add key=”LogUseDefaultCulture” value=”false” />
```

</appSettings>

<!-- End of the settings you may reconfigure -->

```
  <Platforms>
    ...
  </Platforms>
  </configuration>
```

Specifying Location of Temporary Directory

By default, Migration Manager uses the following directories on the target server for storing temporary files during migration:

- `/tmp` on Linux and FreeBSD systems.
- `<operating_system_installation_directory>\PrivateTemp` on Windows systems.

If you have large amounts of data to migrate and are not sure that there is enough free disk space in the default temporary directory location, then you can specify another location for storing temporary files.

This is done by setting environment variables in the operating system of a target server.

➢ *To set a new location of the temporary directory on Linux or FreeBSD servers:*

1. Connect to the server over SSH.
2. Open for editing the file `/etc/psa/psa.conf`.
3. Locate the variable `DUMP_TMP_D` and replace the `/tmp` value with a path to the new location of the temporary directory.

   The new directory must be present in the file system and writing to this directory must be allowed for all users.
4. Save the file.

➢ *To set a new location of the temporary directory on Windows servers:*

1. Connect to the server as administrator.
2. Click **Start**, and then click **Run**.
3. In the **Run** dialog box, type `regedit`, and then click **OK**. This will start Registry Editor.
4. Locate the `HKEY_LOCAL_MACHINE\SOFTWARE\PLESK\PSA Config\Config\` and specify the new location of temporary directory in the `DumpTempDir` variable.

   The default value of the `DumpTempDir` variable is `%plesk_dir%\PrivateTemp\`.
5. Quit Registry Editor.

Performing Migration

➢ ***To perform a migration:***

1. Go to **Home** > **Migration Manager** (in the **Help & Support** group).
2. (Optional) Click **Synchronize**.

   This updates Migration Manager, which may include migration agents used for migrations from hosting platforms other than Parallels Plesk Panel.
3. Click **Start New Migration**.
4. Leave the **Transfer data from another server** option selected, and specify the following options:
   - IP address or the host name of the source server
   - login and password of Administrator/power user of the source server.

   Note: The option **Transfer data already processed by the migration agent and located on the local host** is used to migrate data from a dump already created on the source server. This is useful, for example, in cases when the dump transfer from source server to target fails, or deploying the dump on target server fails. For more information and instructions, refer to the **Troubleshooting** section (on page 25).
5. Select the type of operating system running on the source host.

   This option is available if you are using Parallels Plesk Panel 9 for Windows.
6. Specify directory where temporary files will be stored.
7. Specify whether you want to transfer all domain and user accounts, or only specific accounts.
8. Select the data compression option, if you pay per the amount of transferred data, or if you want to save bandwidth. Data compression saves bandwidth, but consumes more disk space.
9. Click **Next>>**.

   The Migration Manager connects to the specified server and gathers information about the migration objects.
10. (Optional) Select the version of the migration agent and then click **Next >>**.

    This step is performed only if migrating from hosting platforms other than PPP and several versions of migration agent are available.

    Parallels Plesk Panel automatically selects the appropriate agent version. However, if the migration fails, you can try selecting another version of migration agent.
11. (Optional) Select the check boxes corresponding to the user and domain accounts you want to transfer.

    This step is performed if migrating specific objects.

Also, specify what types of data should be transferred:

- all settings and content
- all settings and content except mail
- only mail accounts with e-mail messages

12. Click **Next >>**.

13. Once the data are retrieved from the source server, specify new IP addresses that should be assigned to the transferred objects.

If you have a great number of IP addresses, at this step, you can download the current IP mapping file, correct it using a text editor or running a custom find-and-replace script, and then upload it back to the server.

14. Click **Next >>**.

The data transfer process starts immediately. However, if some of the selected items cannot be transferred because of possible configuration or resource usage conflicts, you will be taken to the next step and prompted to specify the conflict resolution policies.

15. If prompted, specify how to resolve the following types of conflicts:

a Timing conflicts that occur when a migration object already exists on the destination server and has a more recent modification date. You can choose any of the following options:

- Use the configuration and data from the source server. This will overwrite the configuration and data currently present in the destination server.
- Use the configuration from the destination server, and the data from the source server.
- Do not transfer items with timing conflicts.

b Resource usage conflicts that occur when a migration object would exceed the resource usage limits defined on the destination server. You can choose any of the following options:

- Migrate the object and allow resource overuse.
- Do not migrate the object.

c Configuration conflicts that occur when the settings of migration object are neither allowed nor available on the destination server. You can choose to:

- Migrate the object and allow the required configuration options and settings.
- Do not migrate the object.

16. Click **Next >>**.

Once the migration is completed, a detailed report will be presented on the screen.

17. Click **OK** to exit the wizard.

Troubleshooting

This section is designed to help you complete a migration in cases when first steps of migration succeeded, and the following failed. Simplified description of migration process is as follows:

1. (Linux/Unix source only) Migration Manager connects to a source server and uploads a migration agent to it.

   In case of Windows source server, you need to install the Migration Agent manually as described in the **Installing Migration Agent** section (on page 15).
2. Migration manager connects to the migration agent and passes the migration parameters to it.
3. Migration agent creates a dump basing on the information received on the previous step.

   In PPP for Linux/Unix, the default location for dumps is `/usr/local/.`

   In PPP for Windows, default location for dumps is `C:\PMMtemp`, it may be changed as described in the **Configuring Migration Agent** section (on page 16).
4. Migration agent starts transferring the dump to the destination server.

   On the destination server, the dump is saved at the **Temporary Files Location** defined on the Migration Settings screen.
5. Migration agent removes the dump from source server as soon as the transfer is completed.

   In case the transfer fails, dump remains on the source server.
6. Migration manager imports data from the dump in PPP.

The information provided here should be useful in the following cases:

- (Linux/Unix only) Uploading migration agent failed.
- (Linux/Unix only) Creating dump failed.
- Dump transfer failed.
- Dump import on the target server failed.

In this section:

Completing Migrations from Linux/Unix Servers

➢ ***To complete migration if dump transfer to target server failed:***

1. On the source server, locate the required dump directory.

   By default, dump directories are created in `/usr/local/`.

2. Open the file `content-list.xml` to see what files were created.
3. Move all these files, including `dump.xml`, to the destination server.
4. In a Web browser, log in as administrator to target Parallels Plesk Panel.
5. Go to **Home** > **Migration Manager** (in the **Help & Support** group), and then click **Start Migration**.
6. Select the option **Transfer data already processed by the migration agent and located on the local host.**
7. In the **Migration data file location** box, type the path to the directory where you saved the data at the step 3.
8. Click **Next >>**.

➢ ***To complete migration if data import to PPP failed:***

1. In a Web browser, log in as administrator to target Parallels Plesk Panel.
2. Go to **Home** > **Migration Manager** (in the **Help & Support** group), and then click **Start Migration**.
3. Select the option **Transfer data already processed by the migration agent and located on the local host.**
4. In the **Migration data file location** box, type the path to the directory specified previously as **Temporary Files Location**.

   By default, it is `/usr/local/psa/PMM/var/`.

5. Click **Next >>**.

In case a dump creation fails, you may also try to create it manually by using Linux/Unix migration agent - the `PleskX.pl` utility.

➢ ***To create dump manually using command line:***

1. Locate the following folders on your Parallels Plesk Panel 9 server, and copy all their content to a single directory on the source server.
   - On Windows platforms:

`%plesk_dir%\PMM\Migration\Platforms\UnixShared\PleskX\` and `%plesk_dir%\PMM\Migration\Platforms\UnixShared\shared\`

- On Linux/Unix platforms, you need to copy all files from the following folders:

  <parallels_plesk_panel_installation_directory>`/PMM/Agents/PleskX/` and *<parallels_plesk_panel_installation_directory>*`/PMM/Agents/shared`.

2. On the source server, run the `PleskX.pl` utility with the appropriate command line options:

   - To make a copy of all domain and user accounts:

   ```
   # PleskX.pl –dump-all
   ```

   - To make a copy of specific domains:

   ```
   # PleskX.pl –dump-domains=<comma-separated list of domain names>
   ```

   - To make a copy of specific user accounts:

   ```
   # PleskX.pl –dump-resellers=<comma-separated list of resellers' IDs assigned by the source Parallels Plesk Panel system>
   ```

   or

   ```
   # PleskX.pl –dump-clients=<comma-separated list of clients' IDs assigned by the source Parallels Plesk Panel system>
   ```

   - To read about additional command line options supported by the `PleskX` utility, issue the command

   ```
   # PleskX.pl—help
   ```

3. Proceed as described in the first procedure in this section.

Completing Migrations from Windows Servers

➢ ***To complete migration if dump transfer to target server failed:***

1. On the source server, locate the directory with a required dump: *<dumps directory>*\migrator backup*<the latest date of creation>*.

   By default, *<dumps directory>* is C:\PMMTemp\; the location may be changed as described in the **Configuring Migration Agent** section (on page 16).

2. Copy the directory to the destination server.

Note: This and the following steps are true only for migrations from Parallels Plesk Panel 9.x. To complete a migration from an earlier version of Plesk for Windows, use backup/restore utilities as described in the **Migrating from earlier versions of Plesk Panel** section (on page 30).

3. In a Web browser, log in as administrator to target Parallels Plesk Panel.
4. Go to **Home** > **Migration Manager** (in the **Help & Support** group), and then click **Start Migration**.
5. Select the option **Transfer data already processed by the migration agent and located on the local host.**
6. In the **Migration data file location** box, type the path to the directory where you saved the data at the step 3.
7. Click **Next >>**.

➢ ***To complete migration if data import to PPP failed:***

1. In a Web browser, log in as administrator to target Parallels Plesk Panel.
2. Go to **Home** > **Migration Manager** (in the **Help & Support** group), and then click **Start Migration**.
3. Select the option **Transfer data already processed by the migration agent and located on the local host.**
4. In the **Migration data file location** box, type the path to the directory specified previously as **Temporary Files Location**.

   By default, it is C:\temp.

5. Click **Next >>**.

CHAPTER 3

Performing Manual Migrations Using Backup/Restore Utilities

Manual migrations performed with PPP backup and restore utilities imply the following steps:

1. (Optional) Preliminary upgrades and conversions.
2. Backing up the required data on source server.
3. Manual transfer of the created backup to the destination server.
4. (Only for earlier versions of Plesk) Converting backup to PPP 9 format.
5. Restoring the backup.

In this chapter:

Migrating from earlier versions of Plesk Panel

To migrate objects from Plesk v. 7.5 using Plesk Backup Manager, you should create backup on source server 7.5 and then convert it to version 8 with the `backup-convert` utility. Refer to the following article for details: http://kb.parallels.com/en/1727. After that, you may convert the backup to version 9 with the `pre9-backup-convert` utility and then restore it through Backup Manager in the control panel.

Alternatively, you may migrate from 7.5 to 8.6 using Plesk Migration Manager, create backup on Plesk 8.6, convert it to 9 with the `pre9-backup-convert` utility and restore on destination Parallels Plesk Panel 9.

➢ *To migrate from earlier versions of Plesk Panel for Linux/Unix:*

1. On the source server, run the command that creates a server backup.

```
# /usr/local/psa/bin/pleskbackup all /dump.psa
```

Note: For details on creating selective backup, refer to Backup Documentation of the required version available at Parallels Technology Network (http://www.parallels.com/ptn/).

2. Upload the backup (`dump.psa`) to the destination server.
3. Proceed as described in Migrating to Parallels Plesk Panel 9.5 for Linux/Unix (on page 31).

➢ *To migrate from earlier versions of Plesk Panel for Windows:*

1. On the source server, create the server backup using the backup manager GUI.

```
>"%plesk_bin%\backup.exe"
```

Note: For details, refer to the Plesk Backup Guide of the required version available at Parallels Technology Network (http://www.parallels.com/ptn/).

2. Upload the backup (`dump.psa`) to the destination server.
3. Proceed as described in Migrating to Parallels Plesk Panel 9.5 for Windows (on page 33).

In this section:

Migrating to PPP 9.5 for Linux/Unix

➢ ***To restore data:***

1. On the destination server, run the command that converts the backup to Plesk 9 format.

   ```
   # /usr/local/psa/bin/pre9-backup-convert convert -d
   /var/lib/psa/dumps /dump.psa
   ```

   If the operation succeeds, Plesk places the converted backup to backups repository (located in the `/var/lib/psa/dumps/` folder) and displays the name assigned to the backup. You must use the backup name issued by Plesk for restore purposes.

2. Restore the backup from the repository.

   You can restore the backup in two ways:

   - Using Plesk GUI
   - Using Plesk CLI

➢ ***To restore the whole server data through Plesk CLI:***

Use the following command:

```
# /usr/local/psa/bin/pleskrestore—restore
/var/lib/psa/dumps/<BACKUP NAME> -level server
```

Note: For more information on options available if restoring backups using command line, refer to the Backup and Restore Utilities Administrator's Guide available at PPP Documentation page (http://www.parallels.com/products/plesk/docs).

➢ ***To restore the whole server data through Plesk GUI:***

1. Go to **Home** > **Backup Manager**.
2. Click the backup file name.
3. Specify the following settings:
   - **Types of data to be restored**. Select all check boxes.
   - **Suspend domain (Web site) until restoration task is completed**. Select this if you want to avoid possible conflicts that may occur when users modify site content or settings while they are being restored.
   - **Send an e-mail notice when restoration task is completed**. Type your e-mail address if you want to be notified when restoring is completed.
4. Define conflicts resolution policy. Specify what to do if any conflicts occur during restoration.
5. Click **Restore**.

➢ ***To restore a client through Plesk GUI:***

1. Log in to Parallels Plesk Panel as administrator and create new client with the same login as of migrated client.
2. Access local backup repository of the new client: Select **Clients** > **<CLIENT NAME>** > **Backup Manager**.

   Because login of the created client coincides with the login of client from the dump, the converted backup should be shown in the repository.
3. Click the backup name to enter the Backup Details page.
4. Select the required restoration options (see the procedure above, Steps 3-4).
5. Click **Restore**.

➢ ***To restore a domain through Plesk GUI:***

1. Log in to Parallels Plesk Panel as administrator and create new domain with the same name as of migrated domain.
2. Access local backup repository of the new domain: Select **Domains** > **<Domain NAME>** > **Backup Manager**.

   Because name of the created domain coincides with the name of domain from the dump, the converted backup should be shown in the repository.
3. Click the backup name to enter the Backup Details page.
4. Select the required restoration options (see the procedure above, Steps 3-4).
5. Click **Restore**.

Migrating to PPP 9.5 for Windows

➢ ***To restore data:***

1. On the destination server, run the command that converts the backup to the required format.

   ```
   >"%plesk_bin%\pre9-backup-convert"—source=<ABSOLUTE PATH TO BACKUP> --destination="%plesk_dir%\Backup"
   ```

   If the operation succeeds, Plesk places the converted backup to backups repository (located in the `%plesk_dir%\Backup\` folder) and displays the name assigned to the backup. You must use the backup name issued by Plesk for restore purposes.

2. Restore the backup from the repository

   You can restore the backup in two ways:

   - Using Plesk GUI
   - Using Plesk CLI

➢ ***To restore the backup from Plesk CLI, use the following command:***

```
>"%plesk_bin%"\pleskrestore—restore "%plesk_dir%\<BACKUP NAME>" -level server
```

Note: For more information on options available if restoring backups using command line, refer to the Backup and Restore Utilities Administrator's Guide available at PPP Documentation page (http://www.parallels.com/products/plesk/docs).

➢ ***To restore the whole server data through Plesk GUI:***

1. Go to **Home** > **Backup Manager**.
2. Click the backup file name.
3. Specify the following settings:
   - **Types of data to be restored**. Select all check boxes.
   - **Suspend domain (Web site) until restoration task is completed**. Select this if you want to avoid possible conflicts that may occur when users modify site content or settings while they are being restored.
   - **Send an e-mail notice when restoration task is completed**. Type your e-mail address if you want to be notified when restoring is completed.
4. Define conflicts resolution policy. Specify what to do if any conflicts occur during restoration.
5. Click **Restore**.

➢ ***To restore a client account through Plesk GUI:***

1. Log in to Parallels Plesk Panel as administrator and create new client with the same login as of migrated client.

2. Access local backup repository of the new client: Select **Clients** > **<CLIENT NAME>** > **Backup Manager**.

   Because login of the created client coincides with the login of client from the dump, the converted backup should be shown in the repository.

3. Click the backup name to enter the Backup Details page.
4. Select the required restoration options (see the procedure above, Steps 3-4).
5. Click **Restore**.

➢ ***To restore a domain through Plesk GUI:***

1. Log in to Parallels Plesk Panel as administrator and create new domain with the same name as of migrated domain.
2. Access local backup repository of the new domain: Select **Domains** > **<Domain NAME>** > **Backup Manager**.

   Because name of the created domain coincides with the name of domain from the dump, the converted backup should be shown in the repository.

3. Click the backup name to enter the Backup Details page.
4. Select the required restoration options (see the procedure above, Steps 3-4).
5. Click **Restore**.

Migrating Data from PPP 9.0 and later to PPP 9.5

Backup and restore utilities provided by Parallels Plesk Panel 9.0 and later allow manual migrations using GUI and CLI.

In both cases, the data is first backed up on the source server and then restored at the destination.

In this section:

Using Plesk Panel GUI

➢ ***To migrate data with Backup/Restore Utilities using Plesk Panel GUI:***

1. Create the server backup on a source server:
   a. Go to **Home** > **Backup Manager**.
   b. Click **Back Up**.
   c. Specify the following:
      - Backup file name prefix and description. You cannot specify an arbitrary file name, however, you can set the system to add a prefix to backup file names.
      - Splitting of the backup file. To create a multi-volume backup, select the respective check box and specify volume size in megabytes.
      - Location where to store the backup file. Select the repository where you would like to store the backup file.
      - E-mail notification on backup completion. If you want to be notified of the backup completion, type your e-mail address.
      - What data to back up. You can back up only the server settings, or server settings and all user data.
   d. Click **Back Up**. The backup process will start and the progress will be shown under the **Current Back Up Tasks** tab. You can use the **Refresh** button to update the information on the screen.
2. Download the created backup to the destination server.
3. Restore the backup on the destination server:
   a. Go to **Home** > **Backup Manager**.
   b. Click the backup file name.
   c. Specify the following settings:
      - Types of data to be restored. Select all check boxes.
      - Suspend domain (Web site) until restoration task is completed. Select this if you want to avoid possible conflicts that may occur when users modify site content or settings while they are being restored.
      - Send an e-mail notice when restoration task is completed. Type your e-mail address if you want the control panel to notify you when restoring is completed.
      - Conflicts resolution policy. Specify what to do if any conflicts occur during restoration.
   d. Click **Restore**.

In case if any errors or conflicts occur during restoration of data, the wizard will prompt you to select an appropriate resolution. Follow the instructions provided on the screen to complete the wizard.

Using Plesk Panel CLI

➢ ***To migrate from PPP 9.0 and later for Linux/Unix using CLI:***

1. Create the server backup on a source server by running the command

```
# /usr/local/psa/bin/pleskbackup server—output-file=/dump.psa
```

Note: For more information on options available if creating backups using command line, refer to the Backup and Restore Utilities Administrator's Guide available at PPP Documentation page (http://www.parallels.com/products/plesk/docs).

2. Upload the created backup (`dump.psa`) to the destination server.
3. Proceed as described in Migrating to Parallels Plesk Panel 9.5 for Linux/Unix (on page 37).

➢ ***To migrate from PPP 9.0 and later for Windows using CLI:***

1. Create the server backup on a source server by running the command

```
>"%plesk_cli%\pleskbackup" pleskbackup—server—output-
file=c:\dump.psa
```

Note: For more information on options available if creating backups using command line, refer to the Backup and Restore Utilities Administrator's Guide available at PPP Documentation page (http://www.parallels.com/products/plesk/docs).

2. Upload the created backup (`dump.psa`) to the destination server.
3. Proceed as described in Migrating to Parallels Plesk Panel 9.5 for Windows (on page 38).

In this section:

Migrating to PPP 9.5 for Unix/Linux

➢ ***To restore data:***

1. Create file /`import.xml` containing the following lines:

```
<src-dst-files-specification type="server" guid="00000000-
0000-0000-0000-000000000000">
<src>
<dumps-storage-credentials storage-type="file">
<root-dir>/</root-dir>
<file-name>dump.psa</file-name>
</dumps-storage-credentials>
</src>
<dst>
<dumps-storage-credentials storage-type="local">
<root-dir>/var/lib/psa/dumps</root-dir>
</dumps-storage-credentials>
</dst>
</src-dst-files-specification>
```

2. Import the backup to the backups repository.

```
# /usr/local/psa/admin/bin/pmmcli—import-file-as-
dump</import.xml
```

On success, Plesk outputs the backup metadata. Output sample:

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
<errcode>0</errcode>
<data>
<dump description="" owner-guid="00000000-0000-0000-0000-
000000000000" name="migr_info_0808202332.xml" owner-
type="server" creation-date="0808202332"
fullname="migr_info_0808202332.xml" size="17566">
<dump-status dump-status="SIGN-ERROR">
</dump-status>
</dump>
</data>
</response>
```

The `fullname` attribute contains the path to backup as relative to backups repository root.

3. Restore the backup.

```
# /usr/local/psa/bin/pleskrestore—restore
/var/lib/psa/dumps/<fullname VALUE> -level server
```

Note: For more information on options available if restoring backups using command line, refer to the Backup and Restore Utilities Administrator's Guide available at PPP Documentation page (http://www.parallels.com/products/plesk/docs).

Migrating to PPP 9.5 for Windows

➢ ***To restore data:***

1. On the destination server, create file `C:\import.xml` containing the following lines:

```
<src-dst-files-specification type=”server” guid=”00000000-
0000-0000-0000-000000000000”>
<src>
<dumps-storage-credentials storage-type=”file”>
<root-dir>/</root-dir>
<file-name> dump.psa </file-name>
</dumps-storage-credentials>
</src>
<dst>
<dumps-storage-credentials storage-type=”local”>
<root-dir>/var/lib/psa/dumps</root-dir>
</dumps-storage-credentials>
</dst>
</src-dst-files-specification>
```

2. Import the backup to the backups repository.

```
>”%plesk_bin%/pmmcli”—import-file-as-dump<C:\import.xml
```

On success, Plesk outputs the backup metadata. Output sample:

```
<?xml version=”1.0” encoding=”UTF-8”?>
<response>
<errcode>0</errcode>
<data>
<dump description=”” owner-guid=”00000000-0000-0000-0000-
000000000000” name=”migr_info_0808202332.xml” owner-
type=”server” creation-date=”0808202332”
fullname=”migr_info_0808202332.xml” size=”17566”>
<dump-status dump-status=”SIGN-ERROR”>
</dump-status>
</dump>
</data>
</response>
```

The `fullname` attribute contains the path to backup as relative to backups repository root.

3. Restore the backup.

```
>”%plesk_cli%\pleskrestore”—restore
%plesk_dir%\Backup\<fullname VALUE> -level server
```

Note: For more information on options available if restoring backups using command line, refer to the Backup and Restore Utilities Administrator’s Guide available at PPP Documentation page (http://www.parallels.com/products/plesk/docs).

CHAPTER 4

Appendix. Notes on Migrating from cPanel for Unix

After migrating data from cPanel for Unix to Parallels Plesk Panel, you might need to address several issues caused by the difference in functionality of these two control panels.

Database Users with the Same Login on Several Databases

In cPanel, database users with the same login names can exist in several databases, while creating a database user with the same login for another database is prohibited in Parallels Plesk Panel.

This difference leads to somewhat incomplete restore of cPanel hosting data in PPP. In cases when several databases which have users with the same login in cPanel are migrated, only one database will be restored in PPP with this user account, other databases will be migrated but without this database user account.

Anonymous FTP Access on Domain

In Parallels Plesk Panel, anonymous FTP access can be enabled only on a domain hosted on IP address of the Exclusive type.

Therefore, in most cases of migrating shared hosting domains, the domains have the anonymous FTP access disabled after migration to Parallels Plesk Panel. However, all the anonymous FTP content is successfully migrated.

Subdomains Content and CGI Scripts

During the migration, subdomains content and CGI scripts are duplicated in a virtual host file structure, in the `/httpdocs/<subdomain-name>` and `/httpdocs/cgi-bin` directories respectively.

These directories can be removed painlessly, since the content and scripts that actually work are restored to the `/subdomains/<subdomain-name>` and `/cgi-bin` directories.

Secure Content Availability

After migration, secure Web content (available via the https protocol) becomes unavailable. The reason is that in Parallels Plesk Panel, secure Web content can be stored either in a directory different from the directory with common Web content (default option), or in the same directory.

To make a domain secure Web content available, enable the **Use a single directory for housing SSL and non-SSL content** option (the **domain Home page** > **Web site**: **Web Hosting Settings** > **Preferences**: the **Use a single directory for housing SSL and non-SSL content** check box).

Domain Administrator Access to the Control Panel

Domain administrator access to the control panel appear to be disabled after migration.

To enable the control panel access, change the domain administrator preferences:

- using PPP GUI: at **domain Home page** > **Domain Administration**: **Domain Administrator Access**, select the **Allow domain administrator access** check box
- using command line: the `domadmin` utility*****

Password Protection on Web Site Directories

Due to the difference in virtual host structure in cPanel and PPP, password protection of Web site directories is missing after migration.

To bring the protection back, use the protected directories capabilities:

- using PPP GUI: **domain Home page** > **Files**: **Protected Directories**
- using command line: the `protdir` utility*****

Shell Access to Server under Domain FTP Account

Shell access to the server under domain FTP account is forbidden after migration.

To allow the access, change the web hosting settings:

- using PPP GUI: at **domain Home page** > **Web site**: **Web Hosting Settings**, under **Account Preferences**, select the appropriate option next to the **Shell access to server with FTP user's credentials**
- using command line: the `domain` utility*****

WebAdmin Access to Databases

In case a database user password contains an apostrophe, it is successfully migrated to PPP, but it is impossible to connect to the database via WebAdmin using this user account after the migration.

To fix this issue, change the database user password.

Note: For instructions on how to use command line utilities, refer to the *Command Line Reference* available at the Parallels Plesk Panel documentation page (http://www.parallels.com/products/plesk/docs).