

# Using Management Shell Reports and Tracking User Access in the NetVanta UC Server

This configuration guide provides instructions for accessing the Microsoft PowerShell<sup>™</sup> sample scripts and for viewing user access tracking in NetVanta Unified Communications (UC) Server. Microsoft PowerShell scripts provide the ability to automate administrative functions. Sample scripts included with the NetVanta UC Server software can generate basic reports that detail the class of service (CoS) that has been applied to each user, which mailboxes have been idle within a specified time frame, and what levels of access each user has from the UC server data. User access tracking enables administrators to view the date and time of recent access activity for each user profile and identify user accounts that are unused.

This guide consists of the following sections:

- Introduction to Microsoft PowerShell on page 2
- NetVanta UC Server Management Shell Snap-In on page 2
- Hardware and Software Requirements and Limitations on page 2
- Logging into the NetVanta UC Server Management Shell on page 3
- NetVanta UC Server Management Shell Sample Scripts on page 3
- Tracking User Access on page 8

# Introduction to Microsoft PowerShell

Microsoft PowerShell is an interactive command line shell designed for Microsoft Windows® to automate administrative system tasks and develop management tools for common processes. Administrative tasks in Microsoft PowerShell are most commonly performed using *cmdlets*, a special class of programs within the .NET Framework libraries of prebuilt code for common programming tasks. Multiple cmdlets can be combined into *scripts* to perform more complicated tasks, such as creating user profile reports about mailbox usage.

# NetVanta UC Server Management Shell Snap-In

The NetVanta UC Server Management Shell is a Microsoft PowerShell snap-in (a set of cmdlets and a PowerShell provider that extends the functionality of the shell) that allows management of users, identities (extensions), phones, and authentications. This helps administrators to more easily integrate external systems so those systems can affect changes in the UC server. Additionally, the advanced scripting functionality of Microsoft PowerShell allows administrators to easily export, import, migrate, and make other bulk changes to user-related data on the UC server.

The Microsoft PowerShell snap-in is installed as a feature of the NetVanta UC Client (disabled by default) and as a feature of the NetVanta UC Server (enabled by default). After upgrading either the NetVanta UC Client or NetVanta UC Server, use **Programs and Features** (Vista, Server 2008) or **Add/Remove Programs** (XP, Server 2003) to modify the NetVanta UC Client or NetVanta UC Server program to install the NetVanta UC Server Management Shell snap-in feature on the system. Once installed, a new shortcut appears in the **Start** menu called NetVanta UC Server Management Shell. Launching this shortcut will open a Microsoft PowerShell session with the NetVanta UC Server Management Shell snap-in loaded.

Basic information related to using Microsoft PowerShell with the UC server is provided when you launch the NetVanta UC Server Management Shell. Each command provides helpful information and examples of potential usage.

### Hardware and Software Requirements and Limitations

The NetVanta UC Server Management Shell snap-in requires Microsoft PowerShell 2.0 to run its reporting functions. Microsoft PowerShell 2.0 can be obtained online from the Microsoft Download Center (<u>http://www.microsoft.com/download</u>) as a part of the Windows Management Framework Core package.

The NetVanta UC Server Management Shell reporting functions and user access tracking are only available in NetVanta UC Server products running NetVanta UC Server version 4.6 or later.

# Logging into the NetVanta UC Server Management Shell

In order to use cmdlets and run scripts in the NetVanta UC Server Management Shell, you must log in using the NetVanta UC Client administrator user name for the *<username>* variable and the NetVanta UC Client administrator password for the *<password>* variable. At the command prompt, enter:

PS>Set-UCLogIn -LogOnName <username> -LogOnPassword <password>

| Server Management Shell  |  | _ <b>_ _</b> × |
|--|--|----------------|
| Welcome to the ADTRAN NetVanta U   | C Server Management Shell!   | <b></b>        |
| Full list of cmdlets:<br>Only NetUanta UC Server cmdlets:<br>Get general help:<br>Get help for a cmdlet:<br>Get examples for a cmdlet:<br>Get examples for NetUanta UC Server cmdl | Get-Command<br>Get-UCCommand<br>Get-Help<br>Get-Help <cmdlet-name> -<br/>Get-Help <cmdlet-name> -<br/>ets: Get-UCExample</cmdlet-name></cmdlet-name> |                |
| PS>Set-UCLogIn -LogOnName Admin -LogOnPas  | sword -Adtran1_  |                |
|  |  |                |
|  |  | •              |

# NetVanta UC Server Management Shell Sample Scripts

The NetVanta UC Server software comes with sample PowerShell scripts that can be run using NetVanta UC Server Management Shell. These sample scripts are located on your computer in C:\Program Files (x86)\ADTRAN\NetVanta UC Server\PowerShell Samples.

### Setting the Start in folder

- Navigate to Start > All Programs > ADTRAN > NetVanta UC Server. Right-click on the NetVanta UC Server Management Shell icon and select Properties. This will open the NetVanta UC Server Management Shell Properties window.
- Select the Shortcut tab, and locate the Start in field. Ensure that this field contains the path to the PowerShell Samples folder (C:\Program Files (x86)\ADTRAN\NetVanta UC Server\PowerShell Samples). If the Start in field has the path to the PowerShell Samples folder, select OK to exit NetVanta UC Server Management Shell Properties. If the Start in field does not have the path to the PowerShell Samples folder, enter the folder location, select Apply, and select OK.

### Running a NetVanta UC Server Management Shell Sample Script

- 1. Navigate to Start > All Programs > ADTRAN > NetVanta UC Server > NetVanta UC Server Management Shell. This will open the NetVanta UC Server Management Shell.
- 2. Log in using your NetVanta UC Client administrator user name and password as outlined in *Logging into the NetVanta UC Server Management Shell on page 3*.

 Enter the file name of a NetVanta UC Server Management Shell script contained in the PowerShell Samples folder using .\ notation, which tells PowerShell to look for the script file in the current directory (configured in *Step 2 on page 3*). For example:

[PS]C:\Program Files (x86)\ADTRAN\NetVanta UC Server\PowerShell Samples>.\Reports.ps1

| 🎼 UC Server Management Shell   10.200.202.193   Log in using local: Admin   |  |  |  |  |
|---|--|--|--|--|
| Welcome to the ADTRAN NetVanta UC Server Management Shell!  |  |  |  |  |
| Full list of cmdlets:       Get-Command         Only NetWanta UC Server cmdlets:       Get-UCcommand         Get general help:       Get-Help         Get help for a cmdlet:       Get-Help         Get examples for a cmdlet:       Get-Help (cmdlet-name)         Get examples for A cmdlet:       Get-Help (cmdlet-name)         Get examples for NetWanta UC Server cmdlets:       Get-Help (cmdlet-name)         PS>Set-UCLogIn -LogOnName Admin -LogOnPassword Adtran1       LPS J C:\Program Files (x86)\ADTRAN\NetWanta UC Server\PowerShell Samples>.\Reports.ps1_ |  |  |  |  |
| •   |  |  |  |  |

### NetVanta UC Server Management Shell Reporting

The NetVanta UC Server Management Shell reporting script (**Reports.ps1**) is one of the sample scripts included with the NetVanta UC Server software. It allows administrators to access reporting functions that either list users that have been inactive for a specified number of days, count and display the number of users contained in each CoS, or list all users and their CoS.

To access NetVanta UC Server Management Shell reporting script, follow these steps:

 Run the Reports.ps1 script (refer to Running a NetVanta UC Server Management Shell Sample Script on page 3). If you did not log in using the NetVanta UC Server Management Shell, a GUI will appear with fields to enter your user name and password. Enter the NetVanta UC Client administrator user name in the User name field, and enter the NetVanta UC Client administrator password in the Password field. Select OK, and a new GUI will appear on your screen.

| 🔜 Log in to Ne             | tVanta UC Server 📃 🗆 🗙 |   |
|----------------------------|------------------------|---|
| Server name:<br>User name: | 10.200.202.193         | Enter the NetVanta UC Client<br>administrator user name |
| Password:                  | жжини                  | Enter the NetVanta UC Client administrator password.    |
|                            |                        | —— Select <b>OK</b> .                                   |

2. Select the type of report you would like to generate by selecting the check box next to the desired report type and then selecting the **OK** button. A new window containing the selected report type will appear.

| 🔛 Choose a Net¥anta UC Report   |   |
|---|---|
| <ul> <li>Inactive Users</li> <li>This report enumerates users who have been inactive for a specified period of days.</li> </ul> | Select the check box next to the desired report type. |
| C User Counts by Class of Service   |   |
| This report counts the number of users with each class of service.  |   |
| O Users with Class of Service   |   |
| This report identifies which users are in each class of service.  |   |
| OK Cancel   | Select <b>OK</b> to view the report.                  |

### **Inactive Users Report**

The **Inactive Users** report will list users that have not accessed their account by either the telephone user interface (TUI) or the GUI within a specified time.

To access the Inactive Users report, follow these steps:

- 1. After selecting the **Inactive Users** report using the steps outlined in *NetVanta UC Server Management Shell Reporting on page 4*, a dialog box will appear prompting you to enter the number of days of inactivity (**120** days is the default).
- 2. In the **Number of days of inactivity** field, enter the number of days of inactivity, and select the **OK** button.



3. After selecting the number of days of inactivity, a report will appear in a new window displaying all members that have been inactive for at least the number of days specified in the previous step. The Inactive Users report shows the display name of the user (**DisplayName**), the extension of the user (**Identities**), the user's most recent account access via the TUI (**MostRecentTUIAccess**), and the user's most recent account access via the GUI (**MostRecentGUIAccess**).

| 🔀 Report on 1 | lnactive Ne | t¥anta UC Server Us | ers                 |        |
|---------------|-------------|---------------------|---------------------|--------|
| Filter        |             |                     |                     | $\sim$ |
| Add criteria  | •           |                     |                     |        |
| DisplayName   | Identities  | MostRecentTuiAccess | MostRecentGuiAccess |        |
| John Doe      | 6000        | Never               | Never               |        |
| Jane Doe      | 6010        | Never               | Never               |        |
|               |             |                     |                     |        |
|               |             |                     |                     |        |
|               |             |                     |                     |        |
|               |             |                     |                     |        |

### User Counts by Class of Service Report

The User Counts by Class of Service report lists the number of users in each CoS and the name of the CoS. The User Counts by Class of Service report is generated by the NetVanta UC Server Management Shell reporting function when it is selected in the last step outlined in *NetVanta UC Server Management Shell Reporting on page 4*.

| 🗷 Report on NetVanta UC Server User Counts by Class of Service |     |  |
|--|-----|--|
| Filter   | ₽ ⊘ |  |
| 💠 Add criteria 🔻   |     |  |
| Count Name   |     |  |
| 1  |     |  |
| 4 General Voicemail  |     |  |
|  |     |  |
|  |     |  |
|  |     |  |

#### **Users with Class of Service Report**

The Users with Class of Service report lists all users, their extensions (Identities), and the CoS of each user. The Users with Class of Service report is generated by the NetVanta UC Server Management Shell reporting function when it is selected in the last step outlined in *NetVanta UC Server Management Shell Reporting on page 4*.

| Z Report on Classes of Service for Net¥anta UC Server Users |            |                |  |        |
|---|------------|----------------|--|--------|
| Filter  |            |                |  | $\sim$ |
| Add criteria  | -          |                |  |        |
| DisplayName   | Identities | ClassOfService |  |        |
| Admin   | 8504, 8501 |                |  |        |
| Eric Wells  | 2003       | General Voic   |  |        |
| Jane Doe  | 6010       | General Voic   |  |        |
| John Doe  | 6000       | General Voic   |  |        |
| Shaun Wells   | 2004       | General Voic   |  |        |
| 11  |            |                |  |        |
| 11  |            |                |  |        |
| 1   |            |                |  |        |

#### Filtering NetVanta UC Server Reports

The contents of a NetVanta UC Server report can be filtered based on user-specified criteria. The entire content can be filtered by one criterion and those results can be filtered further by specifying additional criteria. The criteria by which a report can be filtered changes depending on the report.

1. To filter the entire content of the report, enter the filter criteria into the **Filter** field located at the top of the report. The filter will be applied automatically as you enter the information. In the following example, the results have been filtered based on **Doe**.

| Report on Inactive NetVanta UC Server Users |            |                     |                     | _ 🗆 🗙 |
|---|------------|---------------------|---------------------|-------|
| Doe   |            |                     |                     | ×     |
| Add criteria                                |            |                     |                     |       |
| DisplayName                                 | Identities | MostRecentTuiAccess | MostRecentGuiAccess |       |
| John Doe                                    | 6000       | Never               | Never               |       |
| Jane Doe                                    | 6010       | Never               | Never               |       |
|   |            |                     |                     |       |
|   |            |                     |                     |       |
|   |            |                     |                     |       |
|   |            |                     |                     |       |
|   |            |                     |                     |       |
|   |            |                     |                     |       |
|   |            |                     |                     |       |

2. To filter the report based on one or more specific criteria, select the **Add criteria** drop-down menu, and select the check box beside the name of the desired filter criteria. Select the **Add** button to add the specified criteria.

|   | 🔊 Report on Inactive Net¥anta UC Se                     | x                            |   |
|---|---|------------------------------|---|
| Select the Add  | Doe<br>→Add criteria ▼<br>□ DisplayName<br>▼ Identities | uiAccess MostRecentGuiAccess | Select the check box<br>next to the desired |
| Select the <b>Add</b><br>button to add ——<br>the filter criteria. | MostRecentTuiAccess MostRecentGuiAccess Add Cancel      | Never                        | filter criteria.                            |

3. After the new criteria is added, a field will appear underneath the **Filter** field that will filter based on the criteria you chose in the previous step. In this example, the general filter results are filtered further by **Identities** for a more specific result.

| 🔀 Report on Inactive Net¥anta UC Server Users |                     |                     |     |
|---|---------------------|---------------------|-----|
| Doe   |                     |                     | × 🔿 |
| and Identities <u>contains</u>                | 601d ×              |                     |     |
| Add criteria                                  | Clear All           |                     |     |
| DisplayName Identiti                          | MostRecentTuiAccess | MostRecentGuiAccess |     |
| Jane Doe 6010                                 | Never               | Never               |     |
|   |                     |                     |     |
|   |                     |                     |     |
|   |                     |                     |     |
|   |                     |                     |     |
|   |                     |                     |     |



You can use more than one filter at a time; however, the effects are cumulative. For example, if you add a **DisplayName** filter and an **Identities** filter, any result must match both criteria in order to be displayed.

# **Tracking User Access**

In addition to the NetVanta UC Server Management Shell reporting functions, user access time tracking enables the administrator to track the activity of users and identify user accounts that are unused. User access time tracking is accessed through the NetVanta UC Client when logged in as an administrator.

To access user access time tracking, follow these steps:

- 1. Navigate to Start>All Programs>ADTRAN>NetVanta UC Server>NetVanta UC Client to open NetVanta UC Client.
- 2. Enter the administrator user name and password (the default user name is **admin** and the default password is **password**) in the provided fields and select enter. NetVanta UC Client will appear in a new window.



- 3. Select the **Administration** navigation bar on the left side of the NetVanta UC Client window to access administrative functions.
- 4. Select the Users topic to preview and access user profiles.

5. In the Users summary pane, select a user whose GUI and TUI access times you would like to view. Details of the user's profile will appear in the details pane. Most recent GUI access and Most recent TUI access display the user's most recent access via the GUI and the TUI, respectively.





Profiles that have never been accessed by a particular means (either GUI or TUI) will display **Never** by that access type. Profiles that have not been accessed by a particular means since the last system update will display **Unknown** by that access type.