



NetVanta Unified Communications Technical Note

Exporting NetVanta UC Server User Data

This configuration guide provides instructions for using the NetVanta UC Server Management Shell snap-in for Microsoft PowerShell™ to export NetVanta UC Server user information. NetVanta UC Server administrators can run a PowerShell script to export each user's extension, name, phone media access control (MAC) address, and phone Internet Protocol (IP) address into a comma separated value (CSV) file. Additionally, two blank columns, one for a direct inward dialing (DID) number or emergency location identification number (ELIN) and one for location, are generated in the exported CSV file for use with an enhanced 911 (E911) service.

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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 NetVanta 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 NetVanta UC Server.

The Microsoft PowerShell snap-in is installed as a feature of NetVanta UC Client (disabled by default) and as a feature of 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 NetVanta UC Server is provided when you launch the NetVanta UC Server Management Shell. Each command provides helpful information and examples.

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 (<http://www.microsoft.com/download>) 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.

The user data export script (**GetUCPhoneInformation.ps1**) is only installed with the server component of NetVanta UC Server products running NetVanta UC Server version 5.1 or later. Only NetVanta UC Server version 5.1 or later can run the user data export script.

Exporting User Data Using PowerShell

Installing NetVanta UC Server installs several PowerShell scripts in the following directory: C:\Program Files (x86)\ADTRAN\NetVanta UC Server\PowerShell Samples. The **GetUCPhoneInformation.ps1** script enables NetVanta UC Server administrators to export a CSV file consisting of a descriptive header and six columns of information for each NetVanta UC Server user. The CSV file contains the following information: ,

Header	The optional headers that identify the information in each column. The headers are: Extension, Name, MacAddress, IPAddress, DID/ELIN, Location
Extension	The user's unique phone identity. This field can contain up to 10 digits.
Name	The name of the user assigned to the Extension . This field can contain up to 128 characters.
MacAddress	The MAC address of the phone assigned to the Extension in the format xx-xx-xx-xx-xx , where each x is a single hexadecimal digit (for example, 0 to 9 and A to F).
IPAddress	The optional IP address of the phone assigned to the Extension in the format n.n.n.n , where each n is a number ranging from 0 to 255 .
DID/ELIN	The DID or ELIN number that specifies the emergency identification number for the Extension . In the exported CSV file, this is a blank field that can be modified by another source. It is not filled when running the GetUCPhoneInformation.ps1 script.
Location	The physical location of the phone assigned to the Extension . In the exported CSV file, this is a blank field that can be modified by another source. It is not filled when running the GetUCPhoneInformation.ps1 script.

In order to export NetVanta UC Server user information using the **GetUCPhoneInformation.ps1** script, follow the steps in the sections below:

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Step 2: Logging in to the NetVanta UC Server Management Shell on page 3

Step 3: Running the User Data Export Script on page 4

Step 1: Setting the Start in Folder

In order for NetVanta UC Server Management Shell to access the **GetUCPhoneInformation.ps1** script, you must first direct the NetVanta UC Server Management Shell to start in the PowerShell Samples directory on the NetVanta UC Server server computer. To set the start in folder to the PowerShell Samples directory, follow these steps:

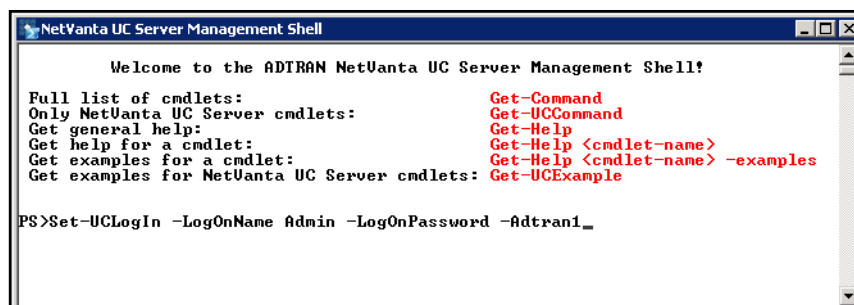
1. Navigate to **Start > All Programs > ADTRAN > NetVanta UC Server**. Right-click on the **NetVanta UC Server Management Shell** icon and select **Properties**. This will open the NetVanta UC Server Management Shell Properties window.
2. Select the **Shortcut** tab, and locate the **Start in** field. 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**.

Step 2: Logging in to the NetVanta UC Server Management Shell

In order to run the **GetUCPhoneInformation.ps1** script in the NetVanta UC Server Management Shell, you must log in using the NetVanta UC Client administrator user name and password. To start the NetVanta UC Server Management Shell and log in, follow these steps:

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. Enter the following command at the command prompt, using the NetVanta UC Server administrator user name for the `<username>` variable and the administrator password for the `<password>` variable:

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



```
NetVanta UC Server Management Shell
Welcome to the ADTRAN NetVanta UC Server Management Shell!
Full list of cmdlets:          Get-Command
Only NetVanta UC Server cmdlets:  Get-UCCommand
Get general help:             Get-Help
Get help for a cmdlet:        Get-Help <cmdlet-name>
Get examples for a cmdlet:    Get-Help <cmdlet-name> -examples
Get examples for NetVanta UC Server cmdlets:  Get-UCExample

PS>Set-UCLogIn -LogOnName Admin -LogOnPassword -Adtran1_
```

After entering the command, the command prompt should change to include the directory configured in [Step 1: Setting the Start in Folder on page 3](#).

```

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 NetVanta UC Server cmdlets: Get-UCCommand
Get general help:              Get-Help
Get help for a cmdlet:         Get-Help <cmdlet-name>
Get examples for a cmdlet:     Get-Help <cmdlet-name> -examples
Get examples for NetVanta UC Server cmdlets: Get-UCExample

PS>Set-UCLogIn -LogOnName Admin -LogOnPassword Adtran1
[PS] C:\Program Files (x86)\ADTRAN\NetVanta UC Server\PowerShell Samples>

```

Step 3: Running the User Data Export Script

After logging in to the NetVanta UC Server Management Shell using the NetVanta UC Server administrator's credentials, you can run the **GetUCPhoneInformation.ps1** script to export the user data. To run the **GetUCPhoneInformation.ps1** script, enter the script name with the desired parameters at the command prompt using `.\` notation, which tells PowerShell to look for the script in the current directory (configured in [Step 1: Setting the Start in Folder on page 3](#)).

```
>.\GetUCPhoneInformation.ps1 -server <server> -header [Yes|No] -user <username> -password <password> -filename <output path>
```

-server <server>	The <server> variable specifies the hostname or IP address of the NetVanta UC Server computer. The -server <server> parameter is not required if you are running the script on the NetVanta UC Server computer that contains the user's information.
-header [Yes No]	Specifies whether the following headers should be added to the exported CSV file: Extension, Name, MacAddress, IPAddress, DID/ELIN, Location These headers describe the order of user information contained in each row of the CSV file. Yes specifies that the headers should be included in the generated CSV file. No specifies the headers should not be included in the CSV file.
-user <username>	The <username> variable specifies the user name of a NetVanta UC Server administrator. The -user <username> parameter is not required if you logged in to the NetVanta UC Server Management Shell using a NetVanta UC Server administrator's user name and password as described in Step 2: Logging in to the NetVanta UC Server Management Shell on page 3 .
-password <password>	The optional <password> variable specifies the password of a NetVanta UC Server administrator. The -password <password> parameter is not required if you logged in to the NetVanta UC Server Management Shell using a NetVanta UC Server administrator's user name and password as described in Step 2: Logging in to the NetVanta UC Server Management Shell on page 3 .
-filename <output path>	The <output path> variable specifies the desired valid path and file name of the exported CSV file. If the filename <output path> is omitted, the file is displayed in the PowerShell console.

The following example command (executed from the NetVanta UC Server computer that contains the user information) exports the user information with headers into a CSV file named **users.csv** in the **C:\Users\Admin\Documents** directory. The format of the command also assumes that the **Start in** folder has been configured as described in [Step 1: Setting the Start in Folder on page 3](#), and the issuer is logged in using the NetVanta UC Server administrator's user name and password as described in [Step 2: Logging in to the NetVanta UC Server Management Shell on page 3](#):

```
>.\GetUCPhoneInformation.ps1 -header Yes -filename C:\Users\Admin\Documents\users.csv
```

Sample CSV File Output

The following is a sample of the CSV output produced by the **GetUCPhoneInformation.ps1** script.

```
Extension, Name, MacAddress, IPAddress, DID/ELIN, Location  
"7000","Jim Doe","00-0B-82-15-2C-DB","10.10.9.65",",",",",",  
"7001","Jane Donner","00-04-13-26-05-77","10.10.9.43",",",",",  
"7444","Terry A. Garcia","00-0a-01-01-11-d1","10.10.17.209",",",",  
"7446","Alann Lester","00-04-F2-14-AC-2D","10.10.8.67",",",",  
"7447","Kody Smith","00-04-F2-15-FE-1C","10.10.9.80",",",",
```