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# **Updates Deployment Commander Version 1.1 Reference Manual**

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## 1.1 About this Manual

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## 1.2 Syntax used on this manual

This manual has been written to be intuitive for the reader. The only considerable format differentiation used on this manual is to indicate an example of a command line, such as:

```
UDC.exe -help
```

Other than this convention, there is no other particular syntax or formatting utilized on this reference manual.

## 1.3 What is UDC?

UDC stands for Updates Deployment Commander, and it is a utility designed to allow quick and simple installation and reporting of Windows Updates on Microsoft Windows operating systems.

The tool is -primarily- a portable command line executable that enables systems administrators and IT departments to take control of Windows Updates on small, medium and even large IT infrastructures, in a very simple way.

UDC uses Windows Update Agent API (Application Programming Interface) provided by Microsoft to access the Windows Update features and interfaces. Therefore, the tool utilizes the mechanism officially provided by the vendor (Microsoft) to accomplish these tasks.

**PLEASE NOTE:** UDC does **not** require installation, it does **not** install any service, and it does **not** modify the Windows registry at all. It is a highly self-sufficient portable tool contained in a single .exe file that requires no setup. Once you have the udc.exe file, you can copy it to other machines and start running it immediately.

Of course, after the initial extraction of UDC you are offered with the option to create shortcuts to the utilities for your convenience (i.e. in your workstation). This is offered just as a convenience; you do not need to perform any kind of preparation work on a particular machine to start using UDC on it. Just copy the udc.exe file and run it.

All of this is not a mere coincidence; it is part of the very nature and goal of UDC's design. We hope that you can appreciate all the flexibility and potential that the tool provides to system administrators when facing patch management tasks.

### 1.3.1 System Requirements and Supported Operating Systems

UDC runs on the following versions of the Microsoft Windows Operating System:

- Microsoft Windows 2000 (Service Pack 3 and Service Pack 4)
- Microsoft Windows XP
- Microsoft Windows 2003 Server
- Microsoft Windows Vista
- Microsoft Windows 2008 Server
- Microsoft Windows 2008 Server Core
- Microsoft Windows 7

Windows versions more recent than the listed above do not exist as of 2012, but they could be potentially supported too, since UDC utilizes Microsoft's WUA API standard.

### 1.4 How to Report Bugs or Problems

We appreciate and welcome any feedback and/or bug report that you could provide to us.

Usually, a file with the capture of the output (utilizing the debug parameter) plus a brief narrative explanation about the scenario is enough for us to start reviewing the issue.

For instance:

```
UDC.exe -debugMode -searchMode -allUpdates > MyOutputLog.txt
```

We will receive the report (as well as requests and feedbacks) at the following email address: [support@sysadminsoftware.com](mailto:support@sysadminsoftware.com)

### 1.5 How to get UDC

To obtain the most recent copy of UDC, go to the website <http://www.sysadminsoftware.com> and follow the UDC download & purchase link. Special discounts for license extensions and upgrades to newer versions may apply.

## 2.1 Installing UDC

UDC is provided on a .ZIP file that you can extract to a temporary folder, and execute the extraction wizard (UDC\_Wizard.exe) .

### 2.2 Using UDC on multiple computers

Once you have extracted all files as detailed on the previous section, you will find the executable of UDC (udc.exe) on the folder where you placed all files. You can copy the file udc.exe to other machines and run locally without the need of any setup or preparation work.

You can quickly start creating reports and installing updates with UDC through Windows shutdown scripts, scheduled tasks, or using remote execution.

### 3.1 How to use UDC

The basic mandatory syntax of UDC consists of one (and only one) parameter to indicate execution mode, and one (and only one) parameter to indicate filtering mode.

A quick example and the most frequent command is:

```
udc.exe -searchMode -allUpdates
```

The example command above will list on screen all updates that are pending for the machine on Windows Update (except for Service Packs, which are not included by default as a safety mechanism). The execution mode on this case is **-searchMode** (search updates), and the filtering mode is **-allUpdates** (show all updates; do not target anything specific).

**The execution mode indicates what you want to do:**

- searchMode** if you want to search and list the results, without installing anything.
- downloadMode** if you want to download updates to install some time later.
- installMode** if you want to install updates (if the updates are not already downloaded, it will download them automatically).
- fullReport** if you want to generate a full report, showing both installed and pending updates.

**The filtering mode indicates how you want to select updates:**

- allUpdates** if you want to target all updates.
- includeOnly:LIST** if you want only to focus the operation on specific updates.
- exdudeUpdates:LIST** if you want to exclude certain updates from the operation.

## 3.2 Parameters for UDC

As explained before, the basic mandatory syntax of UDC consists of one (and only one) parameter to indicate execution mode, and one (and only one) parameter to indicate filtering mode. Additionally, optional parameters for filtering, flow control, and output can be used.

**PLEASE NOTE:** Parameters are not case sensitive. Also, when invoking a parameter, you can prefix with a dash ( - ) a slash ( / ) or use no prefix at all. For instance, **-searchMode** , **-SEARCHMODE** , **/searchMode** and **searchMode** are all the same. Also, it is important to note that the order the parameters are typed on is not relevant.

### 3.3.1 Choosing one of the mandatory Execution Modes

The following are the parameters available to specify the execution mode:

#### **-SEARCHMODE**

This parameter tells UDC that you want to search and list whatever updates are pending, without installing or downloading any update. Usually, you would use this parameter to create a report of updates that are available for download/install. Otherwise, you would be blindly installing updates. As you will see later, the output can be sent to a CSV file so you can have a report that can be opened and worked with Microsoft Excel.

Example:

```
udc.exe -searchMode -onlyUpdates:kb944640, kb964765
```

*This example command would search and print on screen updates kb944640 and kb964765.*

#### **-INSTALLMODE**

This parameter tells UDC that it must install the updates identified by the search filter. If the updates are not already downloaded, UDC will download each update and install it. After installation, UDC will automatically double check (i.e. perform another search) to make sure all the targeted updates were installed.

Example:

```
udc.exe -installMode -allUpdates
```

*This example command would download and install all updates available for the machine.*

#### **-DOWNLOADMODE**

This parameter tells UDC that it must download the updates identified by the search filter, but do not install them. This option is useful if –for instance- you want to download updates during the day to install them later at night (using UDC’s installMode) and accelerate the installation process, as the download would be already done (and therefore considerably reducing your outage window).

Example:

```
Udc.exe -downloadMode -excludeUpdates:kb951900, kb941249
```

*This example command would download updates kb951900 and kb941249.*

### **-FULLREPORT**

This parameter tells UDC that it must generate a full report of updates, showing the status of both available and pending updates for the machine. Please note, this special execution mode does not require (and will ignore) any parameter for filtering. Optional parameters to generate CSV files and obtain the most potential of UDC's reporting capabilities can be used and are explained later on this manual.

Example:

```
udc.exe -fullReport
```

*This example command would print a full report of installed and available updates.*

### **3.3.2 Choosing one of the mandatory filters**

The following are the parameters available to specify the execution mode:

#### **-INCLUDEONLY:{LIST}**

This parameter tells UDC to target only specific update(s), identified by KB number. The {LIST} is one or more KB numbers separated with commas with no spaces in between (**for instance: -includeOnly:kb944648,kb957830**)

Example:

```
udc.exe -searchMode -includeOnly:kb978290,kb964723
```

*This example command would print a report indicating if kb978290 and 964723 are pending.*

#### **-EXCLUDEUPDATES:{LIST}**

This parameter tells UDC to target all but specific update(s), identified by KB number. With this parameter, you indicate that you want to avoid targeting certain updates (and target the rest). The {LIST} is one or more KB numbers separated with commas with no spaces in between (**for instance: -excludeUpdates:kb944648,kb957830**)

Example:

```
udc.exe -searchMode -excludeUpdates:kb934852,kb975244
```

*This example command would print a report showing all pending updates except kb934852 and kb975244.*

#### **-ALLUPDATES**

This parameter is used to target all updates that are available on Windows Update for the machine.

By default, Service Packs are not included, and their inclusion must be forced using an additional parameter `-includeServicePacks` (explained later on this manual).

Example:

```
udc.exe -installMode -allUpdates
```

*This example command downloads and installs all updates pending for the machine.*

### 3.3.3 Using the optional additional filters

The following parameters can be used to narrow down a selection of updates and their usage is not mandatory. You can combine multiple of these filters to make a more specific search.

#### **-ONLYINSTALLED**

This optional parameter changes the scope of the search from pending updates (default) to the updates that are already installed. This is especially useful when you want to obtain a listing of the updates that are present on a machine. This parameter is only valid when using searchMode (since you cannot install an update that is already installed).

Example:

```
udc.exe -searchMode -allUpdates -onlyInstalled
```

*This example command shows all updates that are currently installed.*

#### **-INCLUDEINSTALLED**

This optional parameter adds installed updates to the search. Thus, you will be able to see both pending and installed updates. This parameter is only valid when using searchMode (since you cannot install an update that is already installed).

Example:

```
udc.exe -searchMode -allUpdates -includeInstalled
```

*This example command shows all updates that are pending along with the ones installed.*

#### **-EXCLUDENONSECURITY**

This parameter will automatically filter out updates that are not security related. Using this parameter, the criteria will be narrowed down to security updates only.

Example:

```
udc.exe -searchMode -allUpdates -excludeNonSecurity
```

*This example command shows only all security updates that are pending.*

#### **-OSUPDATESONLY**

Using this parameter, the criteria will be narrowed down to updates that target the Operating System (i.e. updates for Microsoft Office and such, will be excluded).

Example:

```
udc.exe -searchMode -allUpdates -OSupdatesOnly
```

*This example command shows only all updates that are specific to the Operating System.*

### **-INCLUDESERVICEPACKS**

This optional parameter adds Service Packs to the search scope. By default Service Packs are not included on the search and `-includeServicePacks` must be used if you want to include them. This is a safety measure given that the installation of a service pack can produce a major change on the system.

Example:

```
udc.exe -searchMode -allUpdates -includeServicePacks
```

*This example command shows all updates that are pending, including Service Packs.*

### **-SEVERITYLOW**

This parameter indicates that you want to narrow down the search scope to security updates that have a Low severity categorization. You can combine this with other parameters to select additionally other categorizations (Moderate, Important, and Critical) as described ahead.

Example:

```
udc.exe -searchMode -allUpdates -severityLow
```

*This example command shows only updates that are marked with Low severity categorization.*

### **-SEVERITYMODERATE**

This parameter indicates that you want to narrow down the search scope to security updates that have a Moderate severity categorization. You can combine this with other parameters to select additionally other categorizations (Low, Important, and Critical).

Example:

```
udc.exe -searchMode -allUpdates -severityModerate
```

*This example command shows only updates that are marked with Moderate severity categorization.*

### **-SEVERITYIMPORTANT**

This parameter indicates that you want to narrow down the search scope to security updates that have an "Important" severity categorization. You can combine this with other parameters to select additionally other categorizations (Low, Moderate, and Critical).

Example:

```
udc.exe -searchMode -allUpdates -severityImportant
```

*This example command shows only updates that are marked with Important severity categorization.*

### **-SEVERITYCRITICAL**

This parameter indicates that you want to narrow down the search scope to security updates that have a Critical severity categorization. You can combine this with other parameters to select additionally other categorizations (Low, Moderate, and Important).

Example:

```
udc.exe -searchMode -allUpdates -severityCritical
```

*This example command shows only updates that are marked with Critical severity categorization.*

### 3.3.4 Using the optional parameters for Output

#### -DEBUGMODE

This switch will detail what is the state of the parameters received, and the status of UDC execution.

Typically, you would not use this parameter unless requested by our technical support team.

Example:

```
udc.exe -searchMode -allUpdates -debugMode
```

*This example command shows updates pending plus a list of the parameters and status of UDC.*

#### -SILENTMODE

This switch suppresses the output to screen. If this switch is enabled, UDC will not display anything on screen and will only send output to files if such parameters are enabled (see the following commands: -outputFile , -csvReportByRows, and -csvReportByColumns).

Example:

```
udc.exe -installMode -allUpdates -silentMode
```

*This example command will silently install all updates available for the machine.*

#### -OUTPUTFILE:{FileName}

This parameter produces a copy of all output as seen on screen to a file name of your choice. The output to screen will not be suppressed.

To suppress the output to screen, use the **-silentMode** parameter.

Example:

```
udc.exe -installMode -allUpdates -outputFile:myLogs.txt
```

*This example command will install all updates available for the machine showing the results on screen, plus creating a copy of the output in the file myLogs.txt*

#### -CSVREPORTBYROWS:{FileName}

This parameter will produce a report in CSV format (comma separated values) organized by rows that you can use to work with Microsoft Excel or any other spreadsheet/text application. These reports are especially useful on larger infrastructures; the resulting reports can be merged into one report using UDC's reports merger utility explained later on this manual.

Example:

```
udc.exe -installMode -allUpdates -csvReportByRows:myReport.csv
```

*This example command will install all updates available for the machine showing the results on screen, plus creating a report in CSV format organized by rows in the file myReport.csv*

	A	B	C	D	E	F	G	H	I	J
1	[INFO] ** Licensee: Lucas Violini									
2	Hostname=LUCAS	Architecture=x86	Reboot Required=NO	Exit Code=0	Date&Time=20/02/2012 16:14:08	WUA installation=Not Required				
3										
4	Update ID	f03db32b-9584-43d-6e909fef-e9bd-4f0a-91 df67361d-54a0-42 c858c91a-5396-4d54-857f-50cfad70919 00cf51b3-e674-4f85-bd53-88a3b7 7897bb3a-6cddd83a-0bca6c00-e6922c51-7dc								
5	Update Title	Actualización del cl Actualización para Win Actualización de : Actualización para Windows 7 (KB9795 Actualización acumulativa de Me Actualizac Actualizac Actualizac Act								
6	KB number	979099	975496	976422	979538	2284742	2467023	2454826	2502285	2484033 25
7	Status	Available for Down	Available for Downloa	Available for Dow	Available for Download	Available for Download	Available	Available	Available	Available Ava
8										
9										
10										

Picture: a CSV report organized by rows opened with Microsoft Excel.

## -CSVREPORTBYCOLUMNS:{FileName}

This parameter will produce a report in CSV format (comma separated values) organized by columns that you can use to work with Microsoft Excel or any other spreadsheet/text application. These reports are useful when you want to obtain an easy to read report of the updates identified for the computer.

Example:

```
udc.exe -installMode -allUpdates -csvReportByColumns:myReport.csv
```

This example command will install all updates available for the machine showing the results on screen, plus creating a report in CSV format organized by columns in the file myReport.csv

	A	B	C	D	E	F	G	H
1	[INFO] ** Licensee: Lucas Violini							
2	Hostname=LUCAS005	Architecture=x86	Reboot Required=NO	Exit Code=0	Date&Tim	WUA installation=Not Required		
3								
4	Update ID	Update KB number	Update Status	Update Title				
5	f03db32b-9584-43d3-9a06-932dd7598f3a	979099	Available for Download	Actualización del cliente de los Servicios de Windows Rights M				
6	6e909fef-e9bd-4f0a-917b-b7875591ba1f	975496	Available for Download	Actualización para Windows 7 (KB975496)				
7	df67361d-54a0-4227-8409-294d1c8c0d2f	976422	Available for Download	Actualización de seguridad para Windows 7 (KB976422)				
8	c858c91a-5396-4d54-857f-50cfad70919d	979538	Available for Download	Actualización para Windows 7 (KB979538)				
9	00cf51b3-e674-4f85-bd53-88a3b76011a9	2284742	Available for Download	Actualización acumulativa de Media Center para Windows 7 (KB				
10	7897bb3a-7a96-4678-b3c2-2dd8842d366f	2467023	Available for Download	Actualización para Windows 7 (KB2467023)				
11	6cddd83a-21f7-4d4f-8faa-9f131b0af27c	2454826	Available for Download	Actualización para Windows 7 (KB2454826)				
12	0bca6c00-4fd3-4280-96be-b89988fa1702	2502285	Available for Download	Actualización para Windows 7 (KB2502285)				
13	e6922c51-176a-4ad1-9198-98a64da7bac0	2484033	Available for Download	Actualización para Windows 7 (KB2484033)				
14	7dc986c8-f48b-45d5-b56f-16c13cfa82aa	2505438	Available for Download	Actualización para Windows 7 (KB2505438)				
15	11f64c71-08dc-4d95-92b5-e4e280e23083	2511250	Available for Download	Actualización para Windows 7 (KB2511250)				
16	dd246960-2039-4331-9cad-69848cd98da0	2515325	Available for Download	Actualización para Windows 7 (KB2515325)				
17	664a07e1-65eb-411e-9d97-4895c9f6e43d	2506928	Available for Download	Actualización para Windows 7 (KB2506928)				
18	4d4482e6-d332-4f6b-b57d-a60d8e514290	2492386	Available for Download	Actualización para Windows 7 (KB2492386)				
19	2b7b3974-3f22-4cd1-861a-4df3a75997b5	2522422	Available for Download	Actualización para Windows 7 (KB2522422)				
20	b2723114-4113-4f0b-b1dd-a39d27de2b7d	2541014	Available for Download	Actualización para Windows 7 (KB2541014)				
21	1b1d178a-c052-4e9c-a814-700823bd410e	982861	Available for Download	Windows Internet Explorer 9 para Windows 7				
22	7c6e9542-de05-425d-8f65-ead76e3fe4c1	2488113	Available for Download	Actualización para Windows 7 (KB2488113)				
23	7dd475b3-3dce-40c6-88e0-833d9f72cfe4	2545698	Available for Download	Actualización para Windows 7 (KB2545698)				
24	a919297f-b778-499c-afed-be2eb7b26e0b	2547666	Available for Download	Actualización para Windows 7 (KB2547666)				
25	e175bddf-4ffb-42bc-81ef-db69de2ac37e	2529073	Available for Download	Actualización para Windows 7 (KB2529073)				
26	8d3119b7-9064-4c22-abc1-060eed83e39b	982018	Available for Download	Actualización para Windows 7 (KB982018)				
27	0f028fe3-2563-4461-919d-4d084be3991e	2563227	Available for Download	Actualización para Windows 7 (KB2563227)				

Picture: a CSV report organized by columns opened with Microsoft Excel.

### 3.3.5 Using the optional parameters for Flow Control

#### **-DONTINSTALLWUA**

WUA stands for Windows Update Agent, and it is an internal component of the Microsoft Windows Operating system that takes care of operations involving updates. Microsoft releases (and requires) newer versions of this component with certain frequency. This component must be current enough so that UDC works correctly.

For more information see the following KB article:

<http://support.microsoft.com/kb/949104>

By default, UDC will automatically try to install the latest version of WUA if the version present on the computer is not able to interact with the Update Server.

If you do not want this automatic installation of WUA to happen (i.e. you are under a strict change control environment), then use the **-dontInstallWUA** switch to avoid such installation. UDC will try to perform the updates operation requested, and if it cannot continue due local WUA version being too outdated, UDC will fail with an error message.

#### **-REBOOT:{N}**

Some updates require a reboot of the operating system to apply them effectively. This parameter indicates UDC to check if a reboot is necessary as a result of an installation and. If so, UDC will wait the **N** amount of minutes specified, and then it will reboot the system.

#### **-REBOOTFORCED:{N}**

This parameter is similar to **-reboot{N}** except that no checking of reboot required is performed. The system will receive a reboot command **N** minutes after UDC completes its updates operations, no matter what.

#### **-TIMELIMIT:{N}**

This parameter gives UDC a limited amount of time to execute and, if this time limit is reached, execution will abort. The number **N** represents an amount of minutes to be used as the time limit.

#### **-USEWSUS**

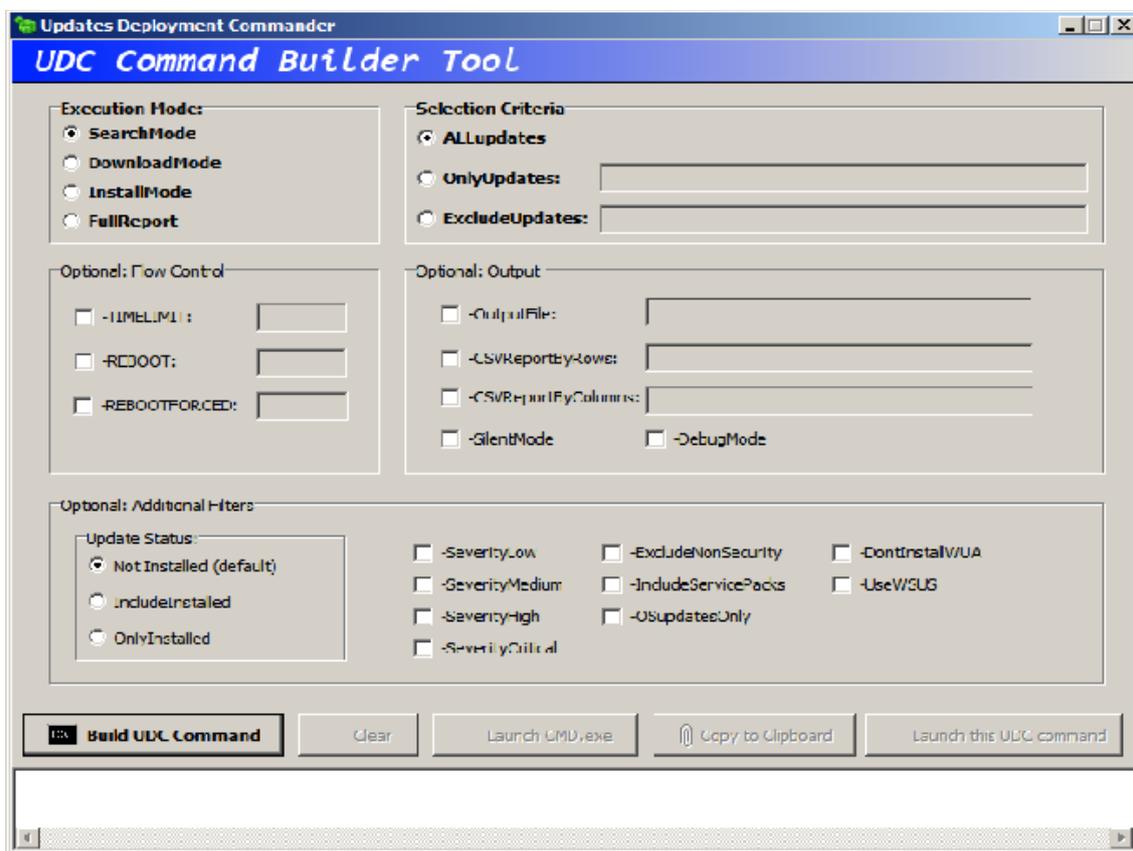
Instructs UDC to utilize any existing local WSUS server that is currently configured on the machine, instead of searching updates online from the public Microsoft Update internet servers.

## 4.1 Using the UDC command builder tool

To start working with UDC without the need to memorize the available parameters, a simple GUI tool has been created so you can generate a UDC command in seconds.

The UDC command builder tool will let you choose from a graphic menu all the possible options, and will generate the specific command line that executes what you want. You can then copy the resulting command line to the clipboard, or launch a UDC to execute it locally right away if you want to test it.

**Location:** This tool located in the extraction folder, with the name of **UDCinterface.exe**



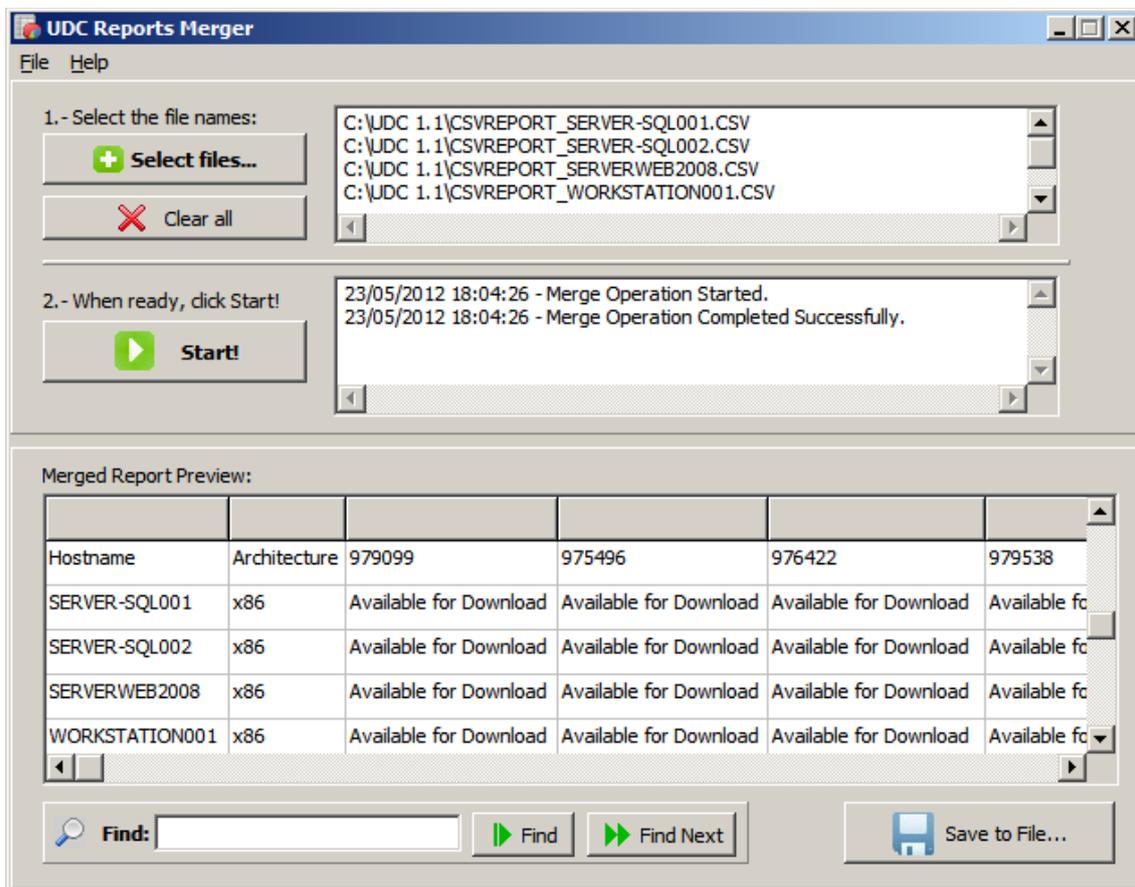
Picture: UDC Command builder tool interface

## 5.1 Using the UDC reports merger tool

The UDC reports merger tool enables you to select multiple CSV reports generated by UDC.exe into one single report.

This tool is very easy to use, and you can merge even hundreds of CSV reports into a single one. The process consists of the following simple steps:

- 1- Click **“Select files...”** and select the CSV file(s) that you want to use as input. You can add more files from different folders by clicking this button as needed. You can click **“Clear all”** at any time to start over.
- 2- Click **“Start!”** and wait for the grid below (“Merged Report Preview”) to be populated.
- 3- A preview of the result will be displayed on screen. Optionally, save this result as a CSV file by clicking the **“Save to File...”** button.



The UDC Reports Merger tool displaying the results.