



## File Import Format

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There are two methods for importing devices into your network inventory:

- [Comma-Separated Values \(CSV\) File](#)
- [Data Integration File \(DIF\)](#)

For ease of use, Cisco strongly recommends the CSV format. Samples of each type of file are in this appendix.



**Note**

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The information in each file type must be entered in the order shown.

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## Comma-Separated Values (CSV) File

You can create a CSV file to import devices. Select **Resource Manager Essentials > Administration > Inventory > File Import** to import the CSV file you created.

The CSV format provides the following device information:

- Full device name or IP address (required)
- Read-only community string (required)
- Read-write community string (optional)
- Serial number (optional)
- User Field 1 (optional)
- User Field 2 (optional)

- User Field 3 (optional)
- User Field 4 (optional)
- Telnet password, enable password, enable secret, TACACS user, TACACS password, TACACS enable user, TACACS enable password, local user, local password, RCP user, and RCP password (optional)

The following is a sample CSV-formatted file.

```
; The following header line is mandatory - only the value of the
; source attribute can be modified (e.g. source = My Excel
spreadsheet).
cisco Systems NM data import, source = Hand edit; Version = 2.0; Type
= Csv
;
; Here are the columns of the table.
;
;Col# = 1; Name = Device name (include domain unless your stie has
; unqualified device names registered in the name services
; - or -
; IP address in dotted decimal notation
;Col# = 2: Name = RO community string
;Col# = 3: Name = RW community string
;Col# = 4: Name = Serial Number
;Col# = 5: Name = User Field 1
;Col# = 6: Name = User Field 2
;Col# = 7: Name = User Field 3
;Col# = 8: Name = User Field 4
;Col# = 9; Name = Telnet password
;Col# = 10; Name = Enable password
;Col# = 11; Name = Enable secret
;Col# = 12; Name = Tacacs user
;Col# = 13; Name = Tacacs password
;Col# = 14; Name = Tacacs enable user
;Col# = 15; Name = Tacacs enable password
;Col# = 16; Name = Local user
;Col# = 17; Name = Local password
;Col# = 18; Name = Rcp user
;Col# = 19; Name = Rcp password; Comment = not used, leave blank
;
; Here are the rows of data.
;
bigrouter.yourcompany.com,public,private,,
dev-2501.yourcompany.com,"Not so, " public as,
thought",private,sn2501,
dev-2502.yourcompany.com,public,"private",sn2502,
dev-2503.yourcompany.com,public,private,sn2503,""
```

```
dev-2504.yourco.com,public,private,sn2504,us1,us2,us3,us4,tPass,ePass,
eSecret,tUsr,tPass,teUsr,tePass,LUsr,LPass,rUsr,rPass
dev-2505.yourco.com,public,private,sn2505,usr1,,,usr4,,,esecret,,tUsr,
tPass,,,LUsr,lPass
dev-2507.yourcompany.com,public,private,sn2507,
dev-2509.yourcompany.com,public,private,sn2509,
dev-2510.yourcompany.com,public,private,sn2510,
dev-2511.yourcompany.com,public,private,sn2511,
dev-2512.yourcompany.com,public,private,sn2512,
dev-2513.yourcompany.com,public,private,sn2513,
dev-2514.yourcompany.com,public,private,sn2514,
dev-2515.yourcompany.com,public,private,sn2515,
dev-2516.yourcompany.com,public,private,sn2516,
dev-4000.yourcompany.com,public,private,,Big Boys
dev-4500.yourcompany.com,public,private,,Big Boys
dev-7000.yourcompany.com,public,private,,Big Boys
dev-7010.yourcompany.com,public,private,,Big Boys
dev-2517.yourcompany.com,public,private,,,nm 25xx
dev-2518.yourcompany.com,public,private,,,mylabel2
dev-2520.yourcompany.com,public,private,,,mylabel2
dev-2521.yourcompany.com,public,private,,,mylabel2
dev-2522.yourcompany.com,public,private,,,mylabel2
dev-2523.yourcompany.com,public,private,,,mylabel2
dev-2524.yourcompany.com,public,private,,,mylabel2
dev-2525.yourcompany.com,public,private,,,mylabel2
dev-4700.yourcompany.com,public,private,,yourlabel1,,yourlabel3,yourla
bel4
dev-7206.yourcompany.com,public,private,,
dev-7505.yourcompany.com,public,private,,,,,yourlabel4
dev-7507.yourcompany.com,public,private,,
dev-7513.yourcompany.com,public,private,,
dev-1200.yourcompany.com,public,private,,
dev-2900.yourcompany.com,public,private,,
dev-3000.yourcompany.com,public,private,,
dev-5000.yourcompany.com,public,private,,
111.222.33.44,public,public,,
```

# Data Integration File (DIF)

You can create a DIF to import devices. Select **Resource Manager Essentials > Administration > Inventory > File Import** to import the DIF file you created.

The DIF is currently encoded in the ISO Latin-1 character set using an extended BNF notation as described in the Essentials online help. The DIF specifies the following characteristics of each device:

- Generic format
- Generic attributes
- Header
- Table area
  - Generic table attributes
  - Device table
  - Group table
  - User annotation table
  - Serial number table
  - TACACS table

The following is a sample DIF, incorporating these characteristics. The sample file was imported from CiscoWorks.

First, the DIF is defined.

```
cisco Systems NM data import, source=CW; Version = 1.0;
```

The device table is defined.

```
Table name = Device basic inventory; Version = 1.0; Column count = 7;
Separator = |;
```

Columns for the device table are defined.

```
Col# = 1; Name = Row#;
Col# = 2; Name = Device name;
Col# = 3; Name = Domain;
Col# = 4; Name = RO community string;
Col# = 5; Name = RW community string;
Col# = 6; Name = Telnet password;
Col# = 7; Name = Enable password;
```

Rows of data for the device table are defined.

```
000001|111.22.333.4|||foeey|more
000002|landfall|cisco.com|public|private||
000003|yet_another_router||read|write|main|charlie
000004|Pinpointed_router|organized.org|read|write|viper|eric
999999
```

An administrative domain table is defined.

```
Table name = Device grouping; Version = 1.0;
Column count = 4; Separator = $
```

Columns for the domains table are defined.

```
Col# = 1; Name = Row#
Col# = 2; Name = Group
Col# = 3; Name = Device name
Col# = 4; Name = Domain
```

Rows of data for the domain table are defined.

```
000001$CW_World$111.22.333.4$
000002$CW_World$yet_another_router$
000003$CW_World$landfall$cisco.com$
000004$CW_Smaller than world$yet_another_router$
999999
```

The user annotation table is defined.

```
Table name = Device annotations; Version = 1.0; Column count = 7;
Separator = $
```

Columns for the annotation table are defined.

```
Col# = 1; Name = Row#
Col# = 2; Name = Device name
Col# = 3; Name = Domain
Col# = 4; Name = Annotation 1
Col# = 5; Name = Annotation 2
Col# = 6; Name = Annotation 3
Col# = 7; Name = Annotation 4
```

Rows of data for the annotations table are defined (the first annotation holds location; the second annotation holds the contact name).

```
000001$111.22.333.4$$San Jose: Bldg F$Joe Smith
000002$yet_another_router$$San Jose: Bldg A$Jill Jones
000003$landfall$cisco.com$San Jose: Bldg F$Joe Smith
000004$yet_another_router$Santa Clara: Bldg 1$George Black
```

999999

The serial number table is defined.

```
Table name = Device serial numbers; Version = 1.0; Column count = 4;
Separator = $
Col# = 1; Name = Row#
Col# = 2; Name = Device name
Col# = 3; Name = Domain
Col# = 4; Name = Serial number
```

RCP data is provided.

```
000001$111.22.333.4$$jsmith$1dasf8
000002$yet_another_router$$jjones$1ruf7dhgd
000003$landfall$cisco.com$jsmith$1dasf8
000004$yet_another_router$gblack$7fghs4
999999
```

The TACACS table is defined.

```
Table name = Device Tacacs access data; Version = 1.0; Column count =
7;
Separator = $
Col# = 1; Name = Row#
Col# = 2; Name = Device name
Col# = 3; Name = Domain
Col# = 4; Name = Tacacs user
Col# = 5; Name = Tacacs password
Col# = 6; Name = Tacacs Enable User;
Col# = 7; Name = Tacacs Enable Password;
```

TACACS data is provided.

```
000001$111.22.333.4$$jsmith$3dfg6$stillJsmith$butNot3dfg6
000002$yet_another_router$$jjones$adf6789
000003$landfall$cisco.com$jsmith$3dfg6
000004$yet_another_router$gblack$jh3df7
999999
```