

# How to Import IP Addresses & Subnets to SolarWinds® IP Address Manager







# How to Import IP Addresses & Subnets to SolarWinds IP Address Manager

<u>SolarWinds IP Address Manager</u> (IPAM) simplifies the process of importing all your IP addresses and subnets. With IPAM's easy-to-use **Import Wizard**, you can now upload all your IP addresses and subnets from Excel or .csv spreadsheets. The wizard walks you through a series of steps and provides the functionality to manage the spreadsheet data that gets uploaded.

IPAM allows you to select which data you want to import and how to map the imported content. The wizard will help you understand the import process so you can import all your IP addresses and subnets for centralized IP address management.

# **Importing IP Addresses and Subnets**

Open the Import Wizard. Click Manage Subnets & IP Addresses >> Network View >> Import >> Import Spreadsheet.

solarwinds		
HOME IP ADDRESSES		
IPAM Summary Manage Subnets & IP	Addresses DHCP & DNS Management	
20 new blog post(s) » More Details	Dismiss Message	
Manage Subnets & IP Addres	ses	
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📲 Add 🗸   🥜 Edit   💥 Delete	🥜 Edit   🧏 Import - 😣 Export   💥 Delete	
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⊿ 🔄 IP Networks	Bulk Add Subnets	0
Discovered Subnets	🔲 🌍 <u>v61</u> F0'00:0000:	48
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Opening Import Wizard in SolarWinds IPAM

#### Step 1: Prepare to Import a Spreadsheet

SolarWinds IPAM includes Excel spreadsheet templates to have your IP addresses and subnets formatted to a standard pattern that makes the importing process easier. You can download these templates and convert your existing spreadsheets with IP addresses and subnets into this form for the import. Once this is done, click **Next**.

Note: Using the IPAM-recommended spreadsheet template is not mandatory. You can also import your own spreadsheet, but using the template is recommended to make the process simpler and faster.





#### Manage Subnets & IP Addresses

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#### Preparing to import a spreadsheet

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Before importing your spreadsheet, you should know that: 5 IP Address MAC Address Status System 10.199.1.0 00-05-1E-02-1548 Import may overwrite existing subnets of the same address space. 10.199.1.1 00-00-29-99-18-61 Tex-265 Used 10.199.1.2 0-19-AA-80-3C-0 Only a .csv, .xls or .xlsx file can be imported -00-8D-84-AB-C If your .xls or .xlsx file has multiple worksheets, the header rows must be identical for each 10.199.1.4 Used worksheet Download an example spreadsheet with IP addresses Don't show this again Parent - Display Par ent Address Name 10.199.0.0/16 CIDR Display Na Туре 10.199.0.0 10.199.1.0/24 10.199.2.0/24 16 16 16 16 16 16 10.199.0.0/16 10.199.0.0 Subnet 10,199.0.0/16 10.199.0.0 Subnet 10.199.3.0/24 10.199.0.0 10.199.0.0 10.199.0.0 10.199.0.0 10.199.0.0/16
10.199.0.0/16 10.199.4.0/24 Subnet 10.199.0.0/16 10.199.6.0/24 10.199.0.0/16 10.199.0.0 10.199.7.0 /24 10.199.0.0/16 10.199.0.0 16 10.199.8.0/24 Download an example spreadsheet with Subnets

Import spreadsheet templates available in SolarWinds IPAM

Step 2: Select the spreadsheet from your system

You can select the spreadsheet (.xls or .xlsx, or .csv) from your system for the import.

While getting your spreadsheet ready for the import make sure you insert a column header row that doesn't contain any duplicate or blank values. Once this is done, click Next.

Select a spreadsheet	
Import existing IP addresses and	their details by uploading a spreadsheet in Excel or CSV text files.
A column header row is require Warning: Import may overwrit Spreadsheet File	d and must not contain duplicate or blank values. Click Help for more information on importing spreadsheets. existing subnets of the same address space.
File to Upload:	Click browse to select a file Browse
This file includes:	IP Addresses

Importing Spreadsheet in SolarWinds IPAM

**Note:** The import might overwrite existing subnets of the same address space.

SolarWinds IPAM allows you to import spreadsheets with multiple worksheets. Each worksheet can denote a specific subnet and contain the IP address allocation for that subnet.





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A1	▼ (= <i>f</i> x	IP Address											×
A	В	С	D	E	F	G	Н		J	K	L	M	-
1 IP Address	Address	CIDR	MAC A	Address (i.e. 00	Hostname	System Na	Description	Contact	System L	c Vendor	Machine Type	Comments	
2 10.140.107.0	0 10.140.107.0	24										Subnet Addres	S
3 10.140.107.1	1 10.140.107.0	24			jstoklasa-c					vendor	machine type	test	_
4 10.140.107.2	2 10.140.107.0	24			dpavlov-dev					vendor	machine type	test	_
5 10.140.107.3	3 10.140.107.0	24			Ifoltynek-de	cisco1	Cisco SAN			vendor	machine type	test	_
6 10.140.107.4	4 10.140.107.0	24	00-22-	19-0E-2A-CB	jpsota-dt.s	JPSOTA-D	Hardware:			vendor	machine type	test	_
7 10.140.107.5	5 10.140.107.0	24			rjohn-dev.s					vendor	machine type	test	_
8 10.140.107.6	5 10.140.107.0	24											_
9 10.140.107.7	7 10.140.107.0	24											_
10 10.140.107.8	3 10.140.107.0	24											_
11 10.140.107.9	9 10.140.107.0	24											_
12 10.140.107.1	10 10.140.107.0	24	B8-AC	-6F-7E-8D-DD	mlucan-de	MLUCAN-I	Hardware:			vendor	machine type	test	_
13 10.140.107.1	11 10.140.107.0	24			basewk8r2					vendor	machine type	test	_
14 10.140.107.1	12 10.140.107.0	24			jprovalil1-d					vendor	machine type	test	•
H + F H 10.1	<b>40.106.0 24</b> / 10.140.1	106.0 23 🦯 🞾 🦯											

Sample spreadsheet with multiple worksheets for importing into SolarWinds IPAM

You can import IP addresses and subnets into IPAM to:

- Add more IP addresses to an existing subnet.
- Replace/overwrite the existing subnet with new IP address data.
- Create new subnets by importing subnet and IP address data into IPAM.

#### Step 3: Match IP Address & Subnet Columns

SolarWinds IPAM allows you to choose the appropriate column from your spreadsheet for each IPAM option.

You may have different column header names in your spreadsheet if you are not using the IPAMrecommended template. IPAM enables you to map those fields from your spreadsheet with the default data fields that are required for the import.

IPAM gives you two options for subnet columns:

- Automatically create subnet hierarchy based on information provided.
- Place new subnets in the Imported Subnet/Supernet/Group folder so you can organize them after import.

When you click **Next**, IPAM validates the data before proceeding to the next step.





Manage	Subnets	& IP	Addresses

# IP Address column matching

Choose the appropriate column from your spreadsheet for each IPAM option.

#### **Required IP information**

IP Address

IP Address

#### Optional

Dual Stack IPv6 Address	Dual Stack IPv6 Address	~
MAC Address (i.e. 00-19-AA-80-3C-0C)	MAC Address (i.e. 00-19-AA-80-3C-0C)	~
Hostname	Hostname	~
DHCP Client Name	[Do not import]	~
System Name (i.e. Router05)	System Name (i.e. Router05)	~
Description	Description	~
Contact	Contact	~
System Location	System Location	~
System Object ID	System Object ID	~
Vendor	Vendor	~
Machine Type	Machine Type	~
Last Boot Time	Last Boot Time	~
Last Synchronization	Last Synchronization	~
Response Time	Response Time	~
Status (i.e. Available, Used)	Status (i.e. Available, Used)	~
Comments	Comments	~
Туре	Alloc Policy	~
Alias	Alias	~
Skip Scan	Skip Scan	*

IP Address Column Matching in SolarWinds IPAM



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Choose the appropriate column from your spreadsheet for	each IPAM option.	
Required IP information		
No subnet information is required. IP addresses can be	manually assigned to subnets after import.	
Optional		
Subnet Address/CIDR (i.e. 10.10.1.0 /24)	[Do not import]	~
Subnet Address (i.e. 10.10.1.0)	Address	v
Subnet CIDR (i.e. 24)	CIDR	~
Subnet Mask (i.e. 255.255.255.0)	[Do not import]	~
Subnet Display Name (i.e. 3rd floor)	[Do not import]	×
Group Description	[Do not import]	v
VLAN	[Do not import]	×
Location	[Do not import]	×

Subnet Column Matching in SolarWinds IPAM

#### Step 4: Select Custom Fields

If the imported spreadsheet columns contain custom fields, determine which fields you would like to have imported by clicking **Add Custom field**.

Ma C	nage Subnets & IP Addresses ustom fields		
	Your spreadsheet contains additional colun	nns, which will be imported as custom text fields.	
	Custom fields in IPAM	Field from your spreadsheet	Action
	Custom_1	Custom_1	
		Lease Expiration	Add Custom Field
		Custom_2	Add Custom Field
			Add all

This opens the **Add Custom Field window** where you can enter the details for the custom field. Once this is done, click **Next**.





Add custom field		?×
Admin  MIPAM Settin Add Custom Fig	us ► eld	•
Database Column:	Lease_Expiration	
Description:	Lease Expiration	
Field Type:	Text 👻	E
	What does Field Type mean?	
Link Title:		
Max string length:	100	
	<ul> <li>Add to groups, supernets, subnets, DHCP servers, scopes and DNS servers, zones</li> <li>Add to IP addresses</li> </ul>	
		-
	Save	el

Adding and importing custom fields

#### Step 5: Confirm Import

IPAM presents all the import information in one snapshot summary before proceeding with the import so you can ensure all the information is correct. If you have any changes to make, you can go back and make the changes accordingly (repeat the steps in order from where you are making changes). Once this is done, click **Import**.

Now you'll get an Import Summary with the status of the import and how many rows were imported.

Your spreadsheet has been successfully imported into IPAM.	Manage Subnets & IP Addresses
Your spreadsheet has been successfully imported into IPAM.	Import Summary
<ul> <li>256 row(s) imported</li> <li>Parent subnets were assigned to root folder</li> </ul>	Your spreadsheet has been successfully imported into IPAM. • 256 row(s) imported • Parent subnets were assigned to root folder

Import summary in SolarWinds IPAM





All the IP addresses and subnets will now be available in the **Manage Subnets & IP Addresses** tab, and you can start managing them using IPAM's centralized Web console.

### Spreadsheet Import Information:

- SolarWinds IPAM allows you to determine where the IP address information is imported to.
- The imported data can be distributed in existing IP addresses across the subnet tree.
- New subnets can automatically be created upon import.
- You can import IPv4 & IPv6 Groups, Supernets & IPV6 Global prefixes, including subnet tree hierarchy.
- Imported data will respect user delegation permissions.
- The name of the worksheet can have the name of the subnet/CIDR.

## Import IP Addresses and Subnets in Bulk

SolarWinds IPAM allows you to import IP addresses and subnets in bulk by typing or copying them on a text field.

Open the Bulk Add Subnets page. Click Manage Subnets & IP Addresses >> Network View >> Import >> Bulk Add Subnets.



Bulk adding subnets in SolarWinds IPAM

This opens the **Bulk Add Subnets** page where you can insert subnet/CIDR prefixes. Click **Parse and Show Results Below**. Confirm success message and then click **Next**.





Manage Subnets & IP Addresses				
Bulk Add Subnets				
Insert Subnet/CIDR prefixe For example: 208.128.0.0/	es in the box below and clic /24	ck Parse And S	how Results Below	
IP Address Allocation S	pace			
10.140.107.0 /24				
10.140.100.0 723				
PARSE AND SHOW RESULTS	S BELOW Only subr	nets which do not	t overlap with existing	subnets are listed
1 subnet(s) parsed suces	sfully.		· · · · · · · · · · · · · · · · · · ·	
Subnet Start	Subnet End	CIDR	Subnet Mask	
10.140.106.0	10.140.107.255	23	255.255.254.0	
				NEXT

Bulk adding subnets in SolarWinds IPAM

Now you have the option of moving the new subnets into the smallest appropriate supernet.

- You can enter the Subnet Properties.
- You can disable the Automatic Subnet Scanning and edit some settings.

Click **Done** to bulk add all the parsed subnets.





Bulk Add Subnets
Subnet Settings
I Selected Subnets
• 10.140.106.0/23
Move new subnets into the smallest appropriate supernet
Subnet Properties
Description:
eg.: Roll-out note, allocation purpose, expected use date
VLAN ID:
Location:
Automatic Scanning
Disable Automatic Scanning
Update but not erase manually entered data
Scan Interval: 240 Minutes
BACK DONE CANCEL

Moving new subnets into the smallest appropriate supernet





## Why SolarWinds IP Address Manager?

#### Eliminate Complexity, Improve Reliability, Save Time & Money!

- Centralized DHCP management for Microsoft® DHCP services, <u>monitoring for Microsoft DNS</u>, ISC DHCP and BIND DNS services, and Cisco® DHCP servers.
- Intuitive Web interface for simple, single-click management and IP address planning.
- Automatic subnet discovery and IP address scanning for the most accurate real-time discovery and verification.
- Easily search addresses for history, op status, MAC, device type, DHCP, DNS properties and more.
- Preventative alerting to ensure that subnets and DHCP scopes don't fill up.
- Role-based access control and detailed event recording to track who made what change
- Supports IPv4 and IPv6 networks.
- Alert notifications to help prevent your subnets & DHCP scopes from filling up.
- Automatically discover used and unused IP addresses.
- Typically deploys in less than an hour.

Getting Starte	ed with IP Address	REMOVE RESOURCE	Top 10 Subnets	with Trar	nsient Addre	sses		EDIT HELP	DNS Records I	Aismatch	Search		DIT HELP
Manager			SUBNET NAME		S IP SP	ACE USED	IPS	IPS	DNS SERVER DNS 2	ONE CLIENT HOST	T NAME	IP IN FWD ZONE	IP IN BWD ZONE
			8 10.199.24.0			100.00*	6 0	0	lab-vm01-texdc lab.tex		muder Joh ter	10.199.1.53	10,199,1,235
Add	Subnets & IP		A PXEclients			100.009		117	laberm01_taylor_lab.tay	(III) acracerap	All Polevilations	10 100 1 141	10 100 1 83
Addu	resses		8 10.199.1.0			71.88%	72	94	lab umOd dauda lab dau	(III) Iab-erc-cit	J6-01.180.08X.	10.100.101	10.100.100
Disco	ver subnets, import from	IMPORT SUBNETS	a test			64.06%	92	160	ab-vito 1-dexuc habitex	IIII lab-proxy-0	01.lab.tex.	10.199.1.94	10.199.1.230
spread	dsheets or add subnets		& Inside-LAN			61.72%	98	133	lab-vm01-texdc lab.tex	lab-proxy-0	01.lab.tex.	10.199.1.230	10.199.1.94
manua	ally		S. curitiba			44.53%	142	107	lab-um01-texdc lab.tex	lillab-sccm2	012.lab.tex.	10.199.2.133	10.199.1.224
L			A 10.199.6.0			43.75%	144	99	Page	1 of 3   🕨   🕅	Items on p	age 5   Sh	ow all
bbA cm	DHCP Server		A 10.199.16.0			30.08%	179	58				Displaying ob	ojects 1 - 5 of 11
Add D	HCP server to manage	ADD DHCP SERVER	A 10.199.25.0			27.34%	186	1					
scope	s and IP address leases		A 10.199.5.0			24.22%	97	24					
									Top 10 DHCP S	copes by Util	lization wi	th Split	EDIT HELP
Add	DNS Server								Scopes				
Add D	NS server to manage zones		IPAM Reports					EDIT HELP					
and D	INS records for your IP	ADD DNS SERVER	IPAM - All available IP A	dresses					SCOPE >> RELATED	PERCENT IPS	USED/	USED /	SCOPE IN SUBNET
addres	sses	IPAM - All reserved IP A	IPAM - All reserved IP Addresses							AVAILABLE	AVAILABLE		
			IPAM - All used IP Addre	1585					Curr on e cur-o	icp.	2/0	2/0	
			IPAM - All Subnets										
		· FOR NED	IPAM Last 250 Events						Ten 40 DHCD 6		:::::		EDIT HEIP
Top 10 Subne	ets by % IP Address Use							TOP TO DRCP 3	copes by our	ization			
SUBNET NAME	% IP SPACE USED	IPS IPS AVAILABLE USED						and a second	SCOPE NAME	95	IP SPACE USED		ILABLE USED
A 192.168.0.0	100.00%	0 251	Last 25 IPAM Ev	ents				EDIT HEUP	Curt 😼			100.00% 0	2
Aug 10.10.100.0	100.00%	0 2	8/7/2014 3-38 AM	CLIEST A	The subnet '10.199.1	5.0 (10.199.16.0 /24)*	fleids have	been changed:	10.199.10.0 / 255.25	5.255.0		100.00% 0	253
ab 10.199.24.0	100.00%	0 0	0112010 0.00744	00001	Display Name to '10.	199.16.0'			Cur3	-		80.00% 4	15
A 10.199.10.0	100.00%	0 253	8/7/2014 3:37 AM	GUEST 🔔	Display Name to '10.	6.0 (10.199.16.0724) 199.15.0	neice nave	e been changed.	outside			50.00% 3	3
PXEclients	100.00%	0 117	000000000000000000000000000000000000000	ourset & 1	The subnet '10.199.9	0 (10.199.7.0 /24)' fie	ids have b	een changed:	CU14			45.45% 24	17
A 10.199.1.0	71.88%	72 94	0///2014-0.00 MM	GUESTA	Display Name to '10.	199.8.0			CU12			40.00% 30	20
and test	64.06%	92 160	8/7/2014 3:30 AM	GUEST 🛓	The subnet "10.199.8 Display Mame to "10.	.0 (10.199.7.0 /24)' fie 199.9 0'	ids have b	een changed:	Secondos			40.00% 30	20
as inside-LAN	61.72%	98 133			The subnet '10.199.7	0 (10.199.7.0 /24)' fle	ids have b	een changed:	36 CW2			22.00% 78	16
al 00.000	54.30%	117 135	6///2014 3:29 AM	GUESTAL C	Display Name to '10.	199.8.0			Evel ah?			21.01% 73	10
255 255 255 252	50.00%	2 0	8/7/2014 3:28 AM	GUEST	The subnet '192.168.	0.0 (192.168.0.0 /24)*	fields have	been changed:	36			21,92% 11	1r
200 200 200 202			01010014 6-32 AM	CUERT -	The ShiMD Credents	al New Contestial 2	har been	added					
			002014 0.35 AM		The subnet '10 109 7	0 (10 199 7 0 /24); fie	ide have h	equeu					
VoIP Subnets by % IP Address Used			8/5/2014 8:16 AM	GUEST Comments to 'Austin, Texas', NeighborScaninterval									
			8/5/2014 6:31 AM	GUEST A	The subnet '10.199.5	0 (10.199.5.0 /25)" fle	ids have b	een changed: Mask					
SUBNET NAME	% IP SPACE USED	AVAILABLE USED			0 255 255 255 0°, CI	DR to '24'	leis haus h	and channel black					
a 10.110.44.0	11.33%	227 27	8/5/2014 6:30 AM	GUEST 🔔	to "255.255.255.128".	CIDR to '25'	ive nave o	een onanged: Maak					
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	6	TEST DE		0 »		t) DO	w	ILOAD	FREE TR	IAL			

SolarWinds IP Address Manager

Fully Functional for 30 Days





SolarWinds (NYSE: SWI) provides powerful and affordable IT management software to customers worldwide - from Fortune 500 enterprises to small businesses. The company works to put its users first and remove the obstacles that have become "status quo" in traditional enterprise software. SolarWinds products are downloadable, easy to use and maintain, and provide the power, scale, and flexibility needed to address users' management priorities. SolarWinds online user community, <u>thwack</u> is a gathering-place where tens of thousands of IT pros solve problems, share technology, and participate in product development for all of the company's products. Learn more today at http://solarwinds.com.

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For additional information, please contact SolarWinds at 866.530.8100 or e-mail sales@solarwinds.com.

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