

Automation Technology > Automation Systems > Industrial Automation Systems SIMATIC
> PLC > Modular Controller SIMATIC S7 > S7-1200 > CPUs

▲ S7-1200 CPU 12xx -- Setting up and parameterizing hardware -- Initializing and parameterizing modules

- How does startup work in an S7-1200?
- What is the connection between subnet masks and IP addresses with regard to subnetting and supernetting (classless inter domain routing CIDR)?
- How can you prevent data loss of runtime-generated parameters when updating your S7-1200 PLC program?
- How can you share runtime-generated parameters between several S7-1200 PLCs with a KTP Basic Panel?
- **How can you change the IP address of an S7-1200 without using STEP 7 Basic?**
- How can you erase the IP address and set your S7-1200 PLC back to factory settings, using the SIMATIC MC memory card (2MB or 24MB)?
- How can you download to a network of several S7-1200 PLCs with the same IP address?
- How can you reset the IP address of your S7-1200 PLC using STEP 7 Basic software?

▼ STEP 7 Basic -- Setting up and parameterizing hardware -- Setting up modules for distributed operation

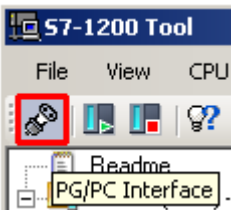
How can you change the IP address of an S7-1200 without using STEP 7 Basic?

Description

The S7-1200 tool enables you to specify the IP address of one or several S7-1200 CPUs without using the STEP 7 Basic software.

This tool is particularly useful for mass filling; if, for example, you download a project by means of a memory card to multiple CPUs in a network and then have to change the IP address for each CPU.

Setting the PG/PC interface

No.	
1.	<p>Click the "PG/PC Interface" button.</p>  <p>Fig. 01</p>
2.	<ol style="list-style-type: none"> 1. Select the access point below for the application: "S7IPTool". 2. For "Interface Parameter Assignment Used:" you select "TCP/IP" and the network card you are using. You achieve the best results with the "TCP/IP(Auto)" for automatic configuration of the network card you are using. 3. Apply the settings with "OK".

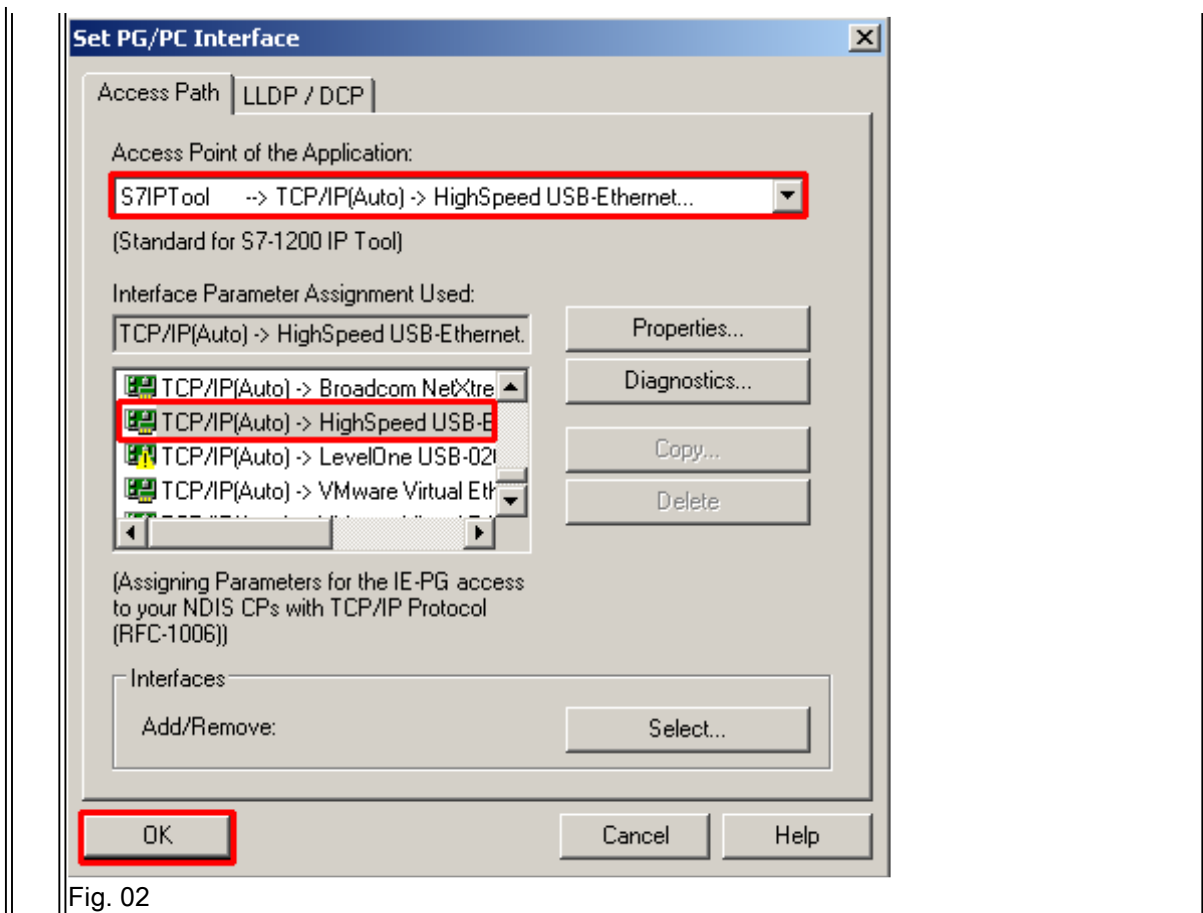


Table 01

Manual assignment of an IP address for your S7-1200

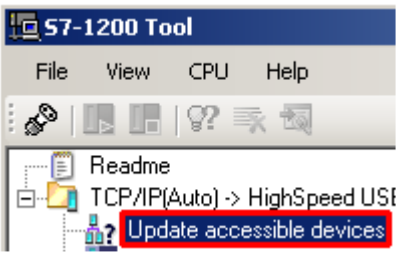
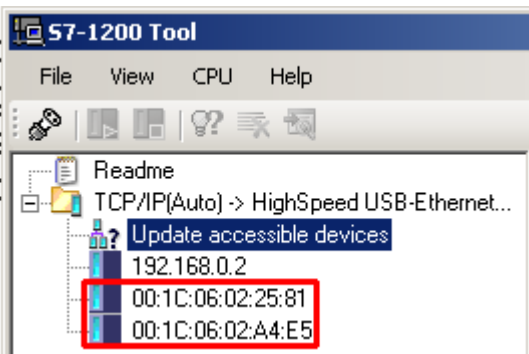
No.	
1.	<p>Double-click the "Update accessible devices" button to update the list of accessible nodes.</p>  <p>Fig. 03</p>
2.	<p>The S7-1200 tool displays the MAC address of CPUs without an assigned IP address.</p> 

Fig. 04

3.
 1. Select the CPU to be configured from the list of accessible devices.
 2. Click the "Flash LED lights" button to flash the status LEDs of the CPU selected.

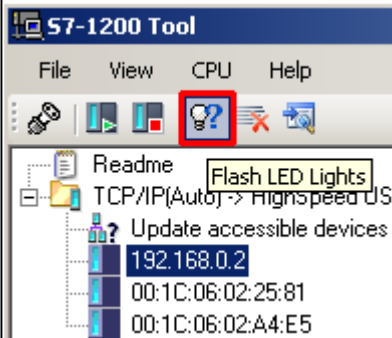


Fig. 05

4. Click the "Stop CPU" button to put the CPU into STOP mode.

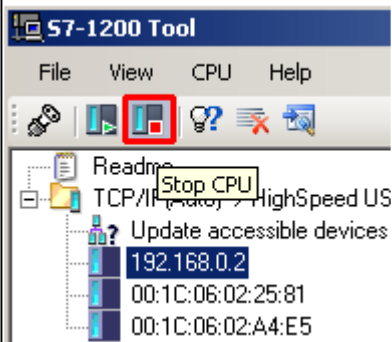


Fig. 06

5.
 1. Specify the IP address, subnet mask and gateway address for the CPU selected.
 2. Then click the "Set" button.
 - If you enable the "Set as Default" option, the current settings are saved as "Default" settings when you click the "Set" button.
 3. Click the "Use Defaults" button to load the saved "Default" settings.

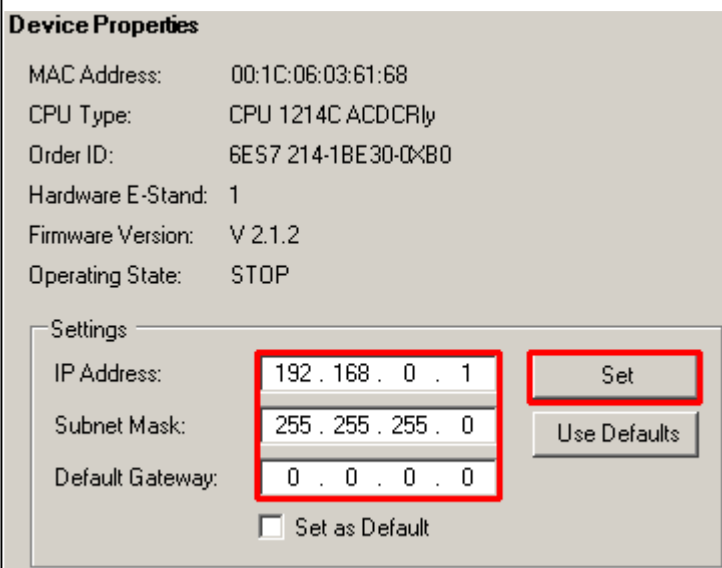


Fig. 07

6. Click the "Start CPU" button to put the CPU into RUN mode.

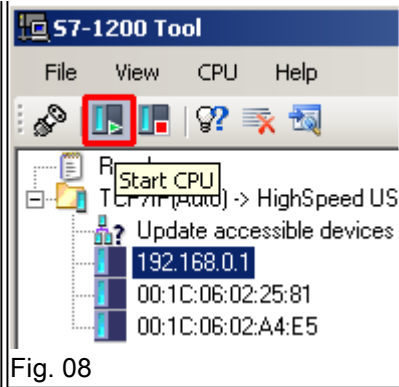


Table 02

Network Mapping

No.	
1.	<p>Mark the network card folder in the tree view. A table is displayed listing all the connected S7-1200 CPUs.</p> <p>Fig. 09</p>
2.	<p>Click the "Export..." button to generate a CSV file with the current network settings of all the connected S7-1200 CPUs. Save this file on your computer.</p>

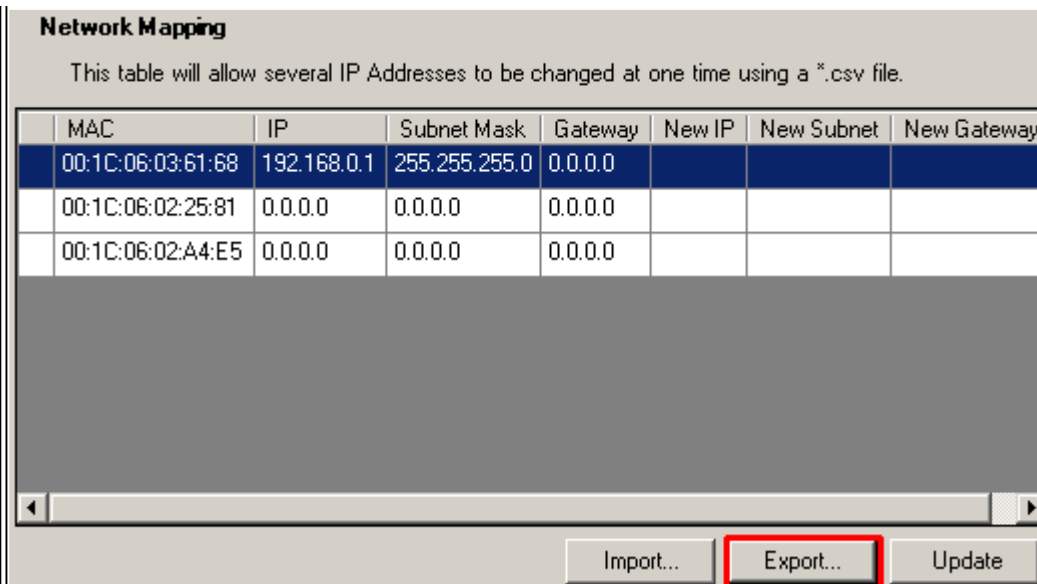


Fig. 10

3. Open the exported CSV file with Notepad.
Each line in the CSV file contains a MAC address, IP address, subnet mask and gateway address for each separate S7-1200 CPU.
You can change the network settings of each CPU as required. You must not change the MAC address.
You can use the "#" character to insert comments in the CSV file.

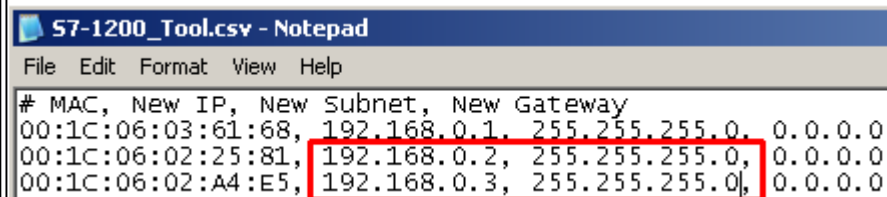


Fig. 11

4. Click the "Import..." button and select the modified CSV file from Step 3.

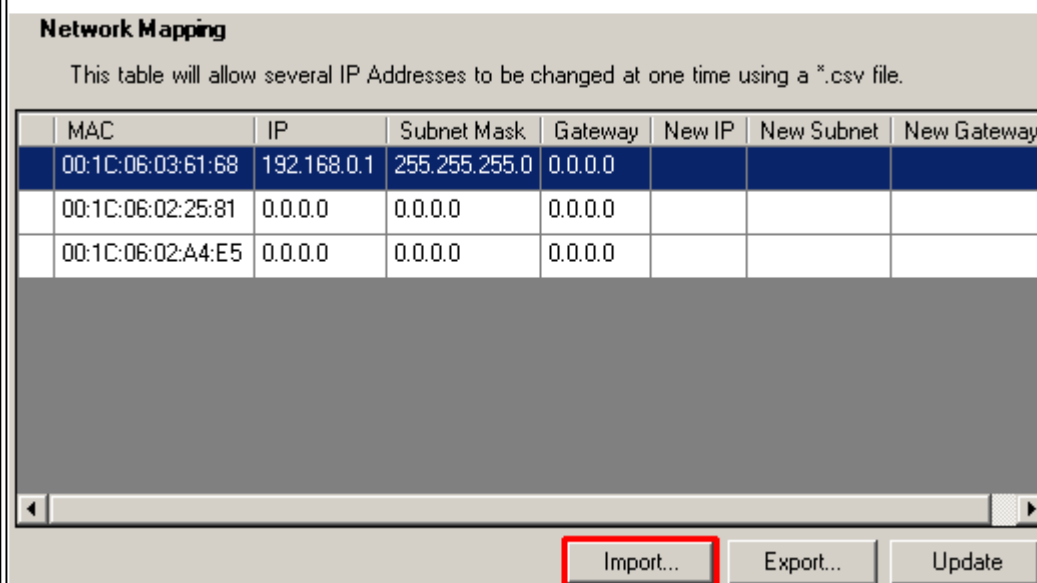


Fig. 12

5. Your changes are shown in the Network Mapping table.
Click the "Update" button to apply the new network settings of all the CPUs.

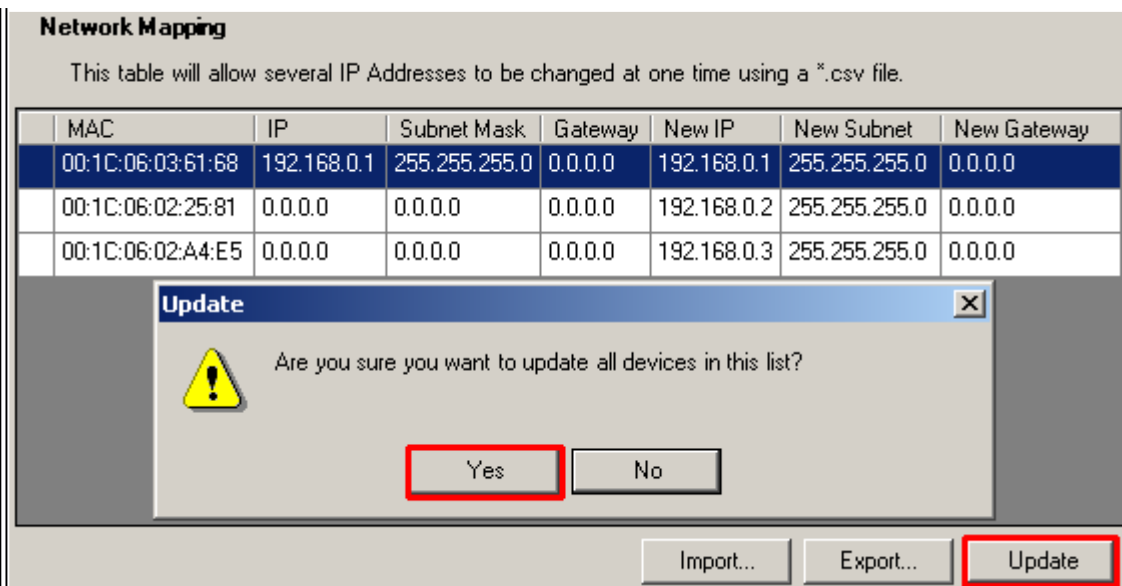


Fig. 13

- 6.
- A green circle next to the S7-1200 CPU indicates that the update has been successful.
 - A red circle indicates that the update has failed.
 - A yellow circle indicates that the S7-1200 CPU is in the process of being updated.

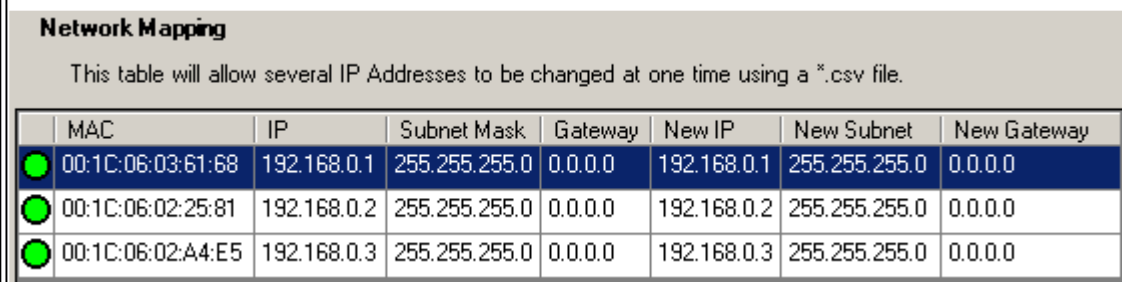


Fig. 14

Table 03

Additional Functions

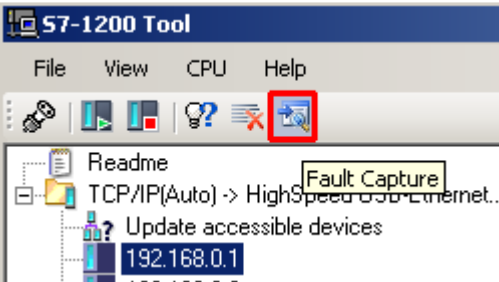
- No.
1. Click the "Fault Capture" button to read out system information from the selected S7-1200 CPU. This information can be forwarded to Siemens for analysis.
- 

Fig. 15

2. Click the "Reset To Factory Defaults" button to reset the selected S7-1200 CPU back to its original factory settings. All the data including the IP address will be deleted.

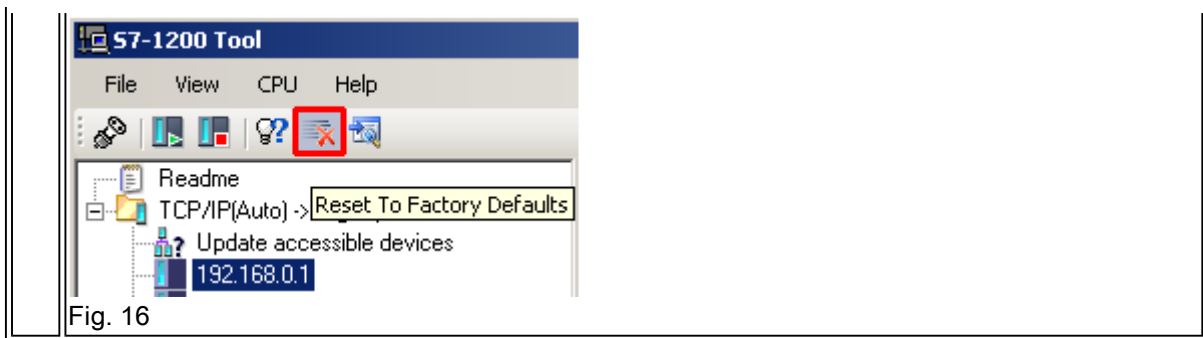


Table 04

Requirements

- Operating system: Windows XP, Windows Vista or Windows 7 (32-bit versions are supported)
- S7-1200
- Ethernet cable
- PC/PG with Ethernet interface
- S7-1200 Tool V2.0.0.5



S7-1200Tool.zip (55566 KB)

Keywords

IPTool, IP TOOL, IP-Tool

Entry ID:41737436 **Date:**2011-11-21