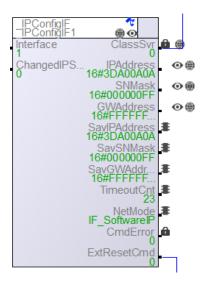
# \_IPConfigIF



This class serves for the real handling of the interface settings. It is derived from the class "NetworkConfig" and can load IP settings from the file autoexec.lsl or from the operating system resp. save them there.

The class is used in the AddOn "IP-Configuration".

### **Interfaces**

#### Servers

| ClassSvr     | Class server, serves as command channel for Newlnst commands.                                  |
|--------------|--|
| IPAddress    | set IP address is the read address in GET commands and the address to set in SET commands      |
| SNMask       | set subnet mask is the read address in GET commands and the address to set in SET commands     |
| GWAddress    | set gateway address is the read address in GET commands and the address to set in SET commands |
| SavIPAddress | saved IP address (for timeout monitoring)  |
| SavSubnet    | saved subnet mask (for timeout monitoring)   |

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| SavGateway  | saved gateway address (for timeout monitoring)   |
|-------------|--|
| TimeoutCnt  | current value of the timeout counter [s]  The timeout monitoring is active, as soon as the NewInst command 11, 12 or 13 is received. The monitoring is reset with the NewInst command 99 - if the timeout runs out earlier, the interface is reset to its old values.  |
| NetMode     | current network mode of this interface IF_undef not yet defined IF_InitDeviceIP initialization running (initial request for the current settings) IF_DeviceIP interface works with settings from autoexec or OS IF_SoftwareIP interface works with manually entered settings   |
| CmdError    | error code in case of an error during processing a set resp. reset command  0 = IPAPI_ERR_NONE no error  -1 = IPAPI_ERR_OSI_FNC operating system to old, function not available -1000 = IPAPI_ERR_NULL invalid pointer (NIL pointer) -1001 = IPAPI_ERR_IFACE IP interface not available -1002 = IPAPI_ERR_IFACE IP interface function not available -1002 = IPAPI_ERR_ETHER_IFACE Ethernet interface not available -1004 = IPAPI_ERR_NETWORK network configuration invalid (same logical network in second Ethernet interface) -1005 = IPAPI_ERR_ADDRESS error during setting/changing the IP address -1006 = IPAPI_ERR_GATEWAY error during setting/changing the gateway -1007 = IPAPI_ERR_PARAM error invalid parameter -1008 = IPAPI_ERR_OPTION error invalid option -1009 = IPAPI_ERR_IP_NOT_READY error, Ethernet interface available but not ready (no IP address set) |
| ExtResetCmd | If this server is written with 1, the NetMode is switched to "IF_DeviceIP" (is needed for a reset via USB stick)   |

### Clients

| Interface         | Serves for defining the interface number (inherited from the NetworkConfig) The numbers 0 and 1 both mean interface 1.  |
|-------------------|---|
| ChangedIPSettings | This client forwards the new IP configurations to the connected server via a NewInst command when changing the IP via the visualization:  uiCmd = 1 aPara[0] = IP address aPara[1] = subnet mask aPara[2] = gateway (the original data type of this parameter is HDINT and was casted in DINT!) |

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## **NewInst methods**

| Command 1<br>Command 2                 | "Get Interface Config from autoexec" "Get Interface Config from OS"  Input: none  Return: pResult^.aData[0] IP address (UDINT) pResult^.aData[4] subnet mask (UDINT) pResult^.aData[8] gateway address (UDINT) presult^.uiLng return length   |
|--|---|
| Command 11<br>Command 12<br>Command 13 | "Set Interface Config to autoexec" "Set Interface Config to OS" "Set Interface Config to autoexec and OS"  Input: pPara^aPara[0] IP address (UDINT) pPara^aPara[1] subnet mask (UDINT)  |
|  | pPara^.aPara[2] gateway address (UDINT) pPara^.aPara[3] time delay [100 ms] for the command (UDINT) pPara^.aPara[4] timeout (UDINT)  Return: pResult^.aData[0] return value (DINT, 0 = OK, -x = Error)  |
| Command 21<br>Command 22<br>Command 23 | "Reset Interface Config to autoexec without timeout monitoring"  "Reset Interface Config to OS without timeout monitoring"  "Reset Interface Config to autoexec and OS without timeout monitoring"  Input:  pPara^.aPara[0] IP address (UDINT)  pPara^.aPara[1] subnet mask (UDINT)  pPara^.aPara[2] gateway address (UDINT)  pPara^.aPara[3] time delay [100 ms] for the command (UDINT)  Return:  pResult^.aData[0] return value (DINT, 0 = OK, -x = Error) |
| Command 99                             | "send OK info to IF-object"  Input: none  |
|  | Return: none  |

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