

# API node types

List of API node types and their GUI designations.

- ▼ **project** - *Project*
  - global\_variables** - *Global Variables*
  - ▼ **library** - *Library*
    - ▼ **fbd\_function** - *FBD Function*
      - help\_document\_english** - *Help Document (English)*
      - help\_document\_german** - *Help Document (German)*
    - ▼ **fbd\_function\_block** - *FBD Function Block*
      - help\_document\_english** - *Help Document (English)*
      - help\_document\_german** - *Help Document (German)*
    - ▼ **fbd\_typical** - *FBD Typical*
      - help\_document\_english** - *Help Document (English)*
      - help\_document\_german** - *Help Document (German)*
    - help\_document\_english** - *Help Document (English)*
    - help\_document\_german** - *Help Document (German)*
    - ▼ **st\_function** - *ST Function*
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    - ▼ **st\_function\_block** - *ST Function Block*
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      - help\_document\_german** - *Help Document (German)*
    - ▼ **cpp\_function\_block** - *C++ Function Block*
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      - help\_document\_german** - *Help Document (German)*
    - array** - *Array*
    - struct** - *Struct*
    - isofast\_idd\_device\_description\_set** - *IDD Device Description Set*
    - gsdml\_library** - *GSDML Library*
  - ▼ **configuration** - *Configuration*
    - ▼ **safeethernet** - *safeethernet*
      - safeethernet\_connection** - *safeethernet Connection*
      - safeethernet\_connection\_to\_elop\_2\_factory\_proxy** - *safeethernet Connection to ELOP II Factory Proxy*
      - safeethernet\_connection\_to\_opc** - *safeethernet Connection to OPC*
      - safeethernet\_connection\_to\_safe\_edr** - *safeethernet Connection to safeEDR*
    - global\_variables** - *Global Variables*
    - ▼ **library** - *Library*
      - ▼ **fbd\_function** - *FBD Function*
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- gsdml\_library** - *GSDML Library*
- ▼ **proxy\_resource\_elop\_2\_factory** - *Proxy Resource ELOP II Factory*
  - hardware\_proxy\_himatrix** - *Hardware*
- ▼ **proxy\_resource\_silworx** - *Proxy Resource SILworX*
  - hardware\_proxy\_himax** - *Hardware*
- ▼ **resource** - *Resource*
  - global\_variables** - *Global Variables*
  - ▼ **watchpages** - *Watchpages*
    - watchpage\_local\_forcing** - *Watchpage (Local Forcing)*
    - watchpage\_global\_forcing** - *Watchpage (Global Forcing)*
  - ▼ **smart\_safety\_test** - *Smart Safety Test*
    - smart\_safety\_test\_test\_plan** - *Test Plan*
    - smart\_safety\_test\_demo\_test\_plan** - *DEMO Test Plan*
- program** - *Program*
- ▼ **protocols** - *Protocols*
  - ▼ **modbus\_v2\_slave\_set** - *Modbus Slave Set V2*
    - ▼ **modbus\_v2\_slave** - *Modbus Slave*
      - ▼ **modbus\_v2\_master** - *Master*
        - modbus\_v2\_dataview\_link** - *Data View Link*
        - modbus\_v2\_dataview\_link\_with\_dataview** - *Data View Link + Data View*
    - ▼ **modbus\_v2\_dataviews** - *Data Views*
      - modbus\_v2\_dataview** - *Data View*
  - hart\_protocol** - *HART Protocol*
  - modbus\_slave\_set** - *Modbus Slave Set*
  - ▼ **modbus\_master** - *Modbus Master*
    - ▼ **modbus\_serial\_modbus** - *Serial Modbus*
      - ▼ **modbus\_slave** - *Modbus Slave*
        - modbus\_fc\_1\_read\_coils** - *FC 1 Read Coils*
        - modbus\_fc\_2\_read\_discrete\_inputs** - *FC 2 Read Discrete Inputs*
        - modbus\_fc\_3\_read\_holding\_registers** - *FC 3 Read Holding Registers*
        - modbus\_fc\_4\_read\_input\_registers** - *FC 4 Read Input Registers*
        - modbus\_fc\_5\_write\_single\_coil** - *FC 5 Write Single Coil*
        - modbus\_fc\_6\_write\_single\_register** - *FC 6 Write Single Register*
        - modbus\_fc\_15\_write\_multiple\_coils** - *FC 15 Write Multiple Coils*
        - modbus\_fc\_16\_write\_multiple\_registers** - *FC 16 Write Multiple Registers*
        - modbus\_fc\_23\_read\_write\_multiple\_registers** - *FC 23 Read Write Multiple Registers*

- modbus\_fc\_100\_read\_coils\_extended** - *FC 100 Read Coils Extended*
- modbus\_fc\_101\_read\_discrete\_inputs\_extended** - *FC 101 Read Discrete Inputs Extended*
- modbus\_fc\_102\_read\_holding\_registers\_extended** - *FC 102 Read Holding Registers Extended*
- modbus\_fc\_103\_read\_input\_registers\_extended** - *FC 103 Read Input Registers Extended*
- modbus\_fc\_104\_write\_multiple\_coils\_extended** - *FC 104 Write Multiple Coils Extended*
- modbus\_fc\_105\_write\_multiple\_registers\_extended** - *FC 105 Write Multiple Registers Extended*
- modbus\_fc\_106\_read\_write\_multiple\_registers\_extended** - *FC 106 Read Write Multiple Registers Extended*
- ▼ **modbus\_gateway** - *Modbus Gateway*
  - ▼ **modbus\_gateway\_slave** - *Gateway Slave*
    - modbus\_fc\_1\_read\_coils** - *FC 1 Read Coils*
    - modbus\_fc\_2\_read\_discrete\_inputs** - *FC 2 Read Discrete Inputs*
    - modbus\_fc\_3\_read\_holding\_registers** - *FC 3 Read Holding Registers*
    - modbus\_fc\_4\_read\_input\_registers** - *FC 4 Read Input Registers*
    - modbus\_fc\_5\_write\_single\_coil** - *FC 5 Write Single Coil*
    - modbus\_fc\_6\_write\_single\_register** - *FC 6 Write Single Register*
    - modbus\_fc\_15\_write\_multiple\_coils** - *FC 15 Write Multiple Coils*
    - modbus\_fc\_16\_write\_multiple\_registers** - *FC 16 Write Multiple Registers*
    - modbus\_fc\_23\_read\_write\_multiple\_registers** - *FC 23 Read Write Multiple Registers*
    - modbus\_fc\_100\_read\_coils\_extended** - *FC 100 Read Coils Extended*
    - modbus\_fc\_101\_read\_discrete\_inputs\_extended** - *FC 101 Read Discrete Inputs Extended*
    - modbus\_fc\_102\_read\_holding\_registers\_extended** - *FC 102 Read Holding Registers Extended*
    - modbus\_fc\_103\_read\_input\_registers\_extended** - *FC 103 Read Input Registers Extended*
    - modbus\_fc\_104\_write\_multiple\_coils\_extended** - *FC 104 Write Multiple Coils Extended*
    - modbus\_fc\_105\_write\_multiple\_registers\_extended** - *FC 105 Write Multiple Registers Extended*
    - modbus\_fc\_106\_read\_write\_multiple\_registers\_extended** - *FC 106 Read Write Multiple Registers Extended*
- ▼ **modbus\_ethernet\_slaves** - *Ethernet Slaves*
  - ▼ **modbus\_tcp\_udp\_slave** - *TCP/UDP Slave*
    - modbus\_fc\_1\_read\_coils** - *FC 1 Read Coils*
    - modbus\_fc\_2\_read\_discrete\_inputs** - *FC 2 Read Discrete Inputs*
    - modbus\_fc\_3\_read\_holding\_registers** - *FC 3 Read Holding Registers*
    - modbus\_fc\_4\_read\_input\_registers** - *FC 4 Read Input Registers*
    - modbus\_fc\_5\_write\_single\_coil** - *FC 5 Write Single Coil*

**modbus\_fc\_6\_write\_single\_register** - *FC 6 Write Single Register*  
**modbus\_fc\_15\_write\_multiple\_coils** - *FC 15 Write Multiple Coils*  
**modbus\_fc\_16\_write\_multiple\_registers** - *FC 16 Write Multiple Registers*  
**modbus\_fc\_23\_read\_write\_multiple\_registers** - *FC 23 Read Write Multiple Registers*  
**modbus\_fc\_100\_read\_coils\_extended** - *FC 100 Read Coils Extended*  
**modbus\_fc\_101\_read\_discrete\_inputs\_extended** - *FC 101 Read Discrete Inputs Extended*  
**modbus\_fc\_102\_read\_holding\_registers\_extended** - *FC 102 Read Holding Registers Extended*  
**modbus\_fc\_103\_read\_input\_registers\_extended** - *FC 103 Read Input Registers Extended*  
**modbus\_fc\_104\_write\_multiple\_coils\_extended** - *FC 104 Write Multiple Coils Extended*  
**modbus\_fc\_105\_write\_multiple\_registers\_extended** - *FC 105 Write Multiple Registers Extended*  
**modbus\_fc\_106\_read\_write\_multiple\_registers\_extended** - *FC 106 Read Write Multiple Registers Extended*  
**sntp\_server** - *SNTP Server*  
**▼ sntp\_client** - *SNTP Client*  
     **sntp\_server\_info** - *SNTP Server Info*  
**profibus\_dp\_slave** - *PROFIBUS DP Slave*  
**▼ profinet\_io\_device** - *PROFINET IO Device*  
     **profinet\_dap\_module** - *DAP Modul*  
     **profinet\_input\_1\_byte** - *Input 1 Byte*  
     **profinet\_input\_2\_bytes** - *Input 2 Bytes*  
     **profinet\_input\_4\_bytes** - *Input 4 Bytes*  
     **profinet\_input\_8\_bytes** - *Input 8 Bytes*  
     **profinet\_input\_16\_bytes** - *Input 16 Bytes*  
     **profinet\_input\_32\_bytes** - *Input 32 Bytes*  
     **profinet\_input\_64\_bytes** - *Input 64 Bytes*  
     **profinet\_input\_128\_bytes** - *Input 128 Bytes*  
     **profinet\_input\_256\_bytes** - *Input 256 Bytes*  
     **profinet\_input\_512\_bytes** - *Input 512 Bytes*  
     **profinet\_input\_1024\_bytes** - *Input 1024 Bytes*  
     **profinet\_output\_1\_byte** - *Output 1 Byte*  
     **profinet\_output\_2\_bytes** - *Output 2 Bytes*  
     **profinet\_output\_4\_bytes** - *Output 4 Bytes*  
     **profinet\_output\_8\_bytes** - *Output 8 Bytes*  
     **profinet\_output\_16\_bytes** - *Output 16 Bytes*  
     **profinet\_output\_32\_bytes** - *Output 32 Bytes*  
     **profinet\_output\_64\_bytes** - *Output 64 Bytes*  
     **profinet\_output\_128\_bytes** - *Output 128 Bytes*  
     **profinet\_output\_256\_bytes** - *Output 256 Bytes*  
     **profinet\_output\_512\_bytes** - *Output 512 Bytes*  
     **profinet\_output\_1024\_bytes** - *Output 1024 Bytes*  
     **profinet\_input\_output\_1\_byte** - *Input/Output 1 Byte*  
     **profinet\_input\_output\_2\_bytes** - *Input/Output 2 Bytes*  
     **profinet\_input\_output\_4\_bytes** - *Input/Output 4 Bytes*  
     **profinet\_input\_output\_8\_bytes** - *Input/Output 8 Bytes*  
     **profinet\_input\_output\_16\_bytes** - *Input/Output 16 Bytes*  
     **profinet\_input\_output\_32\_bytes** - *Input/Output 32 Bytes*  
     **profinet\_input\_output\_64\_bytes** - *Input/Output 64 Bytes*

- profinet\_input\_output\_128\_bytes** - *Input/Output 128 Bytes*
- profinet\_input\_output\_256\_bytes** - *Input/Output 256 Bytes*
- profinet\_input\_output\_512\_bytes** - *Input/Output 512 Bytes*
- profinet\_input\_output\_1024\_bytes** - *Input/Output 1024 Bytes*
- profinet\_f\_input\_output\_1\_byte** - *F-Input/Output 1 Byte*
- profinet\_f\_input\_output\_2\_bytes** - *F-Input/Output 2 Bytes*
- profinet\_f\_input\_output\_4\_bytes** - *F-Input/Output 4 Bytes*
- profinet\_f\_input\_output\_8\_bytes** - *F-Input/Output 8 Bytes*
- profinet\_f\_input\_output\_10\_bytes** - *F-Input/Output 10 Bytes*
- profinet\_f\_input\_output\_12\_bytes** - *F-Input/Output 12 Bytes*
- profinet\_f\_input\_output\_16\_bytes** - *F-Input/Output 16 Bytes*
- profinet\_f\_input\_output\_32\_bytes** - *F-Input/Output 32 Bytes*
- profinet\_f\_input\_output\_64\_bytes** - *F-Input/Output 64 Bytes*
- profinet\_f\_input\_output\_123\_bytes** - *F-Input/Output 123 Bytes*
- profinet\_f\_input\_1\_byte** - *F-Input 1 Byte*
- profinet\_f\_input\_2\_bytes** - *F-Input 2 Bytes*
- profinet\_f\_input\_4\_bytes** - *F-Input 4 Bytes*
- profinet\_f\_input\_8\_bytes** - *F-Input 8 Bytes*
- profinet\_f\_input\_10\_bytes** - *F-Input 10 Bytes*
- profinet\_f\_input\_12\_bytes** - *F-Input 12 Bytes*
- profinet\_f\_input\_16\_bytes** - *F-Input 16 Bytes*
- profinet\_f\_input\_32\_bytes** - *F-Input 32 Bytes*
- profinet\_f\_input\_64\_bytes** - *F-Input 64 Bytes*
- profinet\_f\_input\_123\_bytes** - *F-Input 123 Bytes*
- profinet\_f\_output\_1\_byte** - *F-Output 1 Byte*
- profinet\_f\_output\_2\_bytes** - *F-Output 2 Bytes*
- profinet\_f\_output\_4\_bytes** - *F-Output 4 Bytes*
- profinet\_f\_output\_8\_bytes** - *F-Output 8 Bytes*
- profinet\_f\_output\_10\_bytes** - *F-Output 10 Bytes*
- profinet\_f\_output\_12\_bytes** - *F-Output 12 Bytes*
- profinet\_f\_output\_16\_bytes** - *F-Output 16 Bytes*
- profinet\_f\_output\_32\_bytes** - *F-Output 32 Bytes*
- profinet\_f\_output\_64\_bytes** - *F-Output 64 Bytes*
- profinet\_f\_output\_123\_bytes** - *F-Output 123 Bytes*
- ▼ **profibus\_dp\_master** - *PROFIBUS DP Master*
  - ▼ **profibus\_function\_blocks** - *Function Blocks*
    - profibus\_rdrec\_acyclic\_reading** - *RDREC: Acyclic Reading*
    - profibus\_wrrec\_acyclic\_writing** - *WRREC: Acyclic Writing*
    - profibus\_rdiag\_read\_diagnosis** - *RDIAG: Read Diagnosis*
    - profibus\_ralrm\_receive\_alarms** - *RALRM: Receive Alarms*
    - profibus\_mstat\_set\_master\_state** - *MSTAT: Set Master State*
    - profibus\_slact\_set\_slave\_state** - *SLACT: Set Slave State*
  - profibus\_slave** - *PROFIBUS Slave*
- ▼ **send\_receive\_over\_tcp** - *Send/Receive over TCP*
  - ▼ **send\_receive\_over\_tcp\_function\_blocks** - *Function Blocks*
    - send\_receive\_over\_tcp\_send** - *Send*
    - send\_receive\_over\_tcp\_receive** - *Receive*
    - send\_receive\_over\_tcp\_variable\_receive** - *Variable Receive*
    - send\_receive\_over\_tcp\_receive\_line** - *Receive Line*
    - send\_receive\_over\_tcp\_reset** - *Reset*
  - send\_receive\_over\_tcp\_tcp\_connection** - *TCP Connection*
- com\_user\_task** - *ComUserTask*
- ▼ **opc\_ua\_server\_set** - *OPC UA Server Set*
  - opc\_ua\_com\_reference** - *COM Reference*
  - opc\_ua\_certificates** - *Certificates*
  - opc\_ua\_namespace** - *Namespace*
- ▼ **profinet\_io\_controller\_set** - *PROFINET IO Controller Set*

- ▼ **profinet\_io\_controller** - *PROFINET IO Controller*
  - gsdml\_library** - *GSDML Library*
  - ▼ **profinet\_function\_blocks** - *Function Blocks*
    - profinet\_rdrec\_acyclic\_reading** - *RDREC: Acyclic Reading*
    - profinet\_wrrec\_acyclic\_writing** - *WRREC: Acyclic Writing*
    - profinet\_ralrm\_receive\_alarms** - *RALRM: Receive Alarms*
    - profinet\_mstat\_set\_controller\_state** - *MSTAT: Set Controller State*
    - profinet\_slact\_set\_device\_state** - *SLACT: Set Device State*
    - profinet\_fb\_id\_table** - *FB ID Table*
  - ▼ **profinet\_io\_device\_under\_controller** - *PROFINET IO Device*
    - ▼ **profinet\_application\_relation** - *Application Relation*
      - profinet\_alarm\_cr** - *Alarm CR*
      - profinet\_default\_input\_cr** - *Default Input CR*
      - profinet\_default\_output\_cr** - *Default Output CR*
      - profinet\_input\_cr** - *Input CR*
      - profinet\_output\_cr** - *Output CR*
- ▼ **isofast\_via\_ethernet** - *ISOfast via Ethernet*
  - isofast\_fix\_isote** - *Fix-IsoTE*
  - ▼ **isofast\_custom\_isote** - *Custom-IsoTE*
    - isofast\_custom** - *ISOfast*
    - isofast\_spc\_custom** - *SPC*
- hardware** - *Hardware*
- ▼ **library** - *Library*
  - ▼ **fbd\_function** - *FBD Function*
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  - isofast\_idd\_device\_description\_set** - *IDD Device Description Set*
  - gsdml\_library** - *GSDML Library*
  - safeethernet\_link\_container** - *safeethernet*
  - ▼ **license\_management** - *License Management*

- license\_key** - *License Key*
- alarms\_and\_events** - *Alarms&Events*
- ▼ **hipro\_s\_v2** - *HIPRO-S V2*
  - ▼ **hipro\_s\_local\_resource** - *Local Resource*
  - hipro\_s\_remote\_resource** - *Remote Resource*
- ▼ **opc\_server\_set** - *OPC Server Set*
  - safeethernet\_link\_container** - *safeethernet*
  - ▼ **opc\_server** - *OPC Server*
    - ▼ **license\_management** - *License Management*
      - license\_key** - *License Key*
    - opc\_host** - *OPC Host*
    - safeethernet\_opc\_ack\_connection** - *OPC-A&E-Ack*
- ▼ **safe\_edr\_set** - *safeEDR-Set*
  - safeethernet\_link\_container** - *safeethernet*
  - ▼ **safe\_edr** - *safeEDR*
    - ▼ **license\_management** - *License Management*
      - license\_key** - *License Key*
    - safe\_edr\_host** - *safeEDR Host*
- ▼ **operator\_training\_system** - *Operator Training System*
  - ▼ **license\_management** - *License Management*
    - license\_key** - *License Key*
  - global\_variables** - *Global Variables*
  - program** - *Program*
  - operator\_training\_system\_host** - *OTS Host*
  - ▼ **library** - *Library*
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    - alarms\_and\_events** - *Alarms&Events*
    - ▼ **watchpages** - *Watchpages*
      - watchpage\_local\_forcing** - *Watchpage (Local Forcing)*
      - watchpage\_global\_forcing** - *Watchpage (Global Forcing)*
    - ▼ **smart\_safety\_test** - *Smart Safety Test*

**smart\_safety\_test\_test\_plan** - *Test Plan*

**smart\_safety\_test\_demo\_test\_plan** - *DEMO Test Plan*

▼ **safeethernet** - *safeethernet*

**safeethernet\_connection** - *safeethernet Connection*

**safeethernet\_connection\_to\_elop\_2\_factory\_proxy** - *safeethernet Connection to ELOP II Factory Proxy*

**safeethernet\_connection\_to\_opc** - *safeethernet Connection to OPC*

**safeethernet\_connection\_to\_safe\_edr** - *safeethernet Connection to safeEDR*

**user\_management** - *User Management*