OPC-Solutions from Softing
Table of Contents

1. Softing’s Product Scope for OPC
2. dataFEED OPC Suite
3. OPC-Toolkits
4. Who are the typical customers?
5. Why you should buy from Softing
1. Softing’s Product Scope for OPC

Softing is a leading manufacturer of Industrial Automation solutions and offers a wide range of OPC-products:

- **dataFEED OPC Suite**
  The dataFEED OPC Suite is an important communication link for connecting PLC controllers in the factory to superior data clients like SCADA, MES, ERP etc....

- **OPC-Toolkits**
  for creating your individual OPC-Server or OPC-Client

  The keyword for this is “Process Data Management”.
1. Softing’s Product Scope for OPC
2. dataFEED OPC Suite
3. OPC-Toolkits
4. Who are the typical customers?
5. Why you should buy from Softing
2. dataFEED OPC Suite

dataFEED OPC Suite is the new “all-in-one“ suite for OPC Communication:

- **Connectivity:**
  - Connects OPC-DA-Servers to OPC-DA- and OPC-UA-Clients
  - Connects OPC-DA-Servers to SQL database and/or Data File
  - Connects OPC-Server-to-Server, OPC-Client-to-Client

- **Integrated OPC-PLC-Servers** for S7, S5, B&R, CLX, Modbus-TCP, Mitsubishi

- **Apps to improve your OPC-Communication** (Tunnel, Optimizer, Concentrator, Bridge etc....)
2.1 dataFEED OPC Suite: integrated OPC-Servers

Data Flow from your PLCs to your OPC-Clients

Step 1: from From PLC to Server-PC:

- Softing’s dataFEED OPC Suite comprises a wide range of different OPC-PLC-Servers for OPC-DA and OPC-UA
- The purpose of the OPC-Servers is to exchange cyclic process data between the PLCs in the fab and a server-PC.
- The data flow is bi-directional (read and write).

In the sketch above you can see that the PLCs are connected to the server-PC either via Ethernet or (in case of older S7-PLCs from Siemens) via an Ethernet-MPI gateway from Softing.
2.1 dataFEED OPC Suite: integrated OPC-Servers

Data Flow from your PLCs to your OPC-Clients

Step 2: from Server-PC to OPC-Client:
- The Softing-OPC-Server runs on the server-PC
- It transforms the cyclic process data into OPC-items and offers these OPC-items to any connected OPC-Client-Application.
- These OPC-Client applications (SCADA, MES, ERP, etc.) can be located
  – either on the server-PC itself
  – or on any remote OPC-Client-PC connected via Ethernet
2.1 dataFEED OPC Suite: integrated OPC-Servers

Types of OPC-Servers:
The dataFEED OPC Suite offers a wide range of integrated OPC-servers for PLCs

**dataFEED OPC-Suite:**
- Siemens S7 + S5
- Allen Bradley CLX, SLC, PLC 5
- Mitsubishi Melsec-Q
- B&R
- Modbus/TCP

**Other OPC-Servers:**
- SNMP
- ISO-H1
- PROFIBUS

---

### Protocols Supported by OPC Servers

<table>
<thead>
<tr>
<th>Transport Protocols</th>
<th>TCP/IP</th>
<th>TCPIP+H1 OPC Server</th>
<th>TCPIP-S OPC Server</th>
<th>Modbus OPC Server</th>
<th>Siemens OPC Server</th>
<th>Rockwell OPC Server</th>
<th>Mitsubishi OPC Server</th>
<th>SNMP OPC Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFC1006 (ISO on TCP)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>H1 (ISO on TCP)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application Protocols</th>
<th>S7 Protocol</th>
<th>S5-AP</th>
<th>CLX ControlLogix</th>
<th>CLX CompactLogix</th>
<th>CLX Performance Optimization</th>
<th>SLC500 Protocol</th>
<th>PLC-5 Protocol</th>
<th>Melsec-Q</th>
<th>Modbus/TCP</th>
<th>Send/Receive</th>
<th>NETLink</th>
<th>DCOM Tunnel (Server/Client)</th>
<th>SNMP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

---

Copyright © 2016 Softing Industrial. All rights reserved.
2.1 dataFEED OPC Suite: integrated OPC-Servers

General benefits of Softing-OPC-Servers:

• Stable and performing
• Easy to implement (e.g. by symbol import from PLC)
• One handling style for many different PLCs
2.2 dataFEED OPC Suite: Apps to improve your OPC-Communication

- **OPC-Tunnel incl. Store&Forward:** for avoiding hassle with DCOM settings in case of a distributed communication via Ethernet. The integrated Store&Forward function automatically saves your data in case the communication to the client is down.
2.2 dataFEED OPC Suite: Apps to improve your OPC-Communication

- **OPC-Optimizer:**
  In case that several OPC-Clients are connected to one OPC-Server: The Client requests are bundled by the Optimizer which makes the server much more stable and performing.

- **OPC-Concentrator:**
  It bundles several OPC-servers to just one server with only one common name space. This way the access from the OPC-Clients will be easier to implement and the performance will be enhanced.
2.2 dataFEED OPC Suite:  
Apps to improve your OPC-Communication

- **OPC-to-File:**
  Writes OPC-data directly into a file (e.g. XLS or CSV)

- **OPC-to-Database:**
  Writes OPC-data coming in from the OPC-server directly into a database
2.2 dataFEED OPC Suite:
Apps to improve your OPC-Communication

- PLC2PLC: Direct Data Exchange between two PLCs
  - Easy to use PLC Gateway Application
  - Integration of heterogeneous systems
  - No other network components required, such as expensive gateways
2.2 dataFEED OPC Suite: Apps to improve your OPC-Communication

General benefits of dataFEED OPC Suite:

It makes your OPC-communication

- More stable
- More performing
- Much easier to implement

More info:

1. Softing’s Product Scope for OPC
2. dataFEED OPC Suite
3. OPC-Toolkits
4. Who are the typical customers?
5. Why you should buy from Softing
3. OPC-Toolkits

OPC Classic Development Toolkits:
Create your individual OPC-Server or OPC-Client

• Data Access
• Alarms&Events
• XML-DA
• OPC-UA

The OPC Classic Toolkits are the world-leading software for the fast and easy development of fully compliant OPC clients and servers for Windows and other operating systems. Using the OPC Toolkits, developers are able to focus on their project goals rather than spending time learning the details of OPC specification or DCOM technology.
3. OPC-Toolkits

OPC Unified Architecture Development Toolkits: Fast Development of OPC UA Servers and Clients

• For OPC-UA-Servers and OPC-UA-Client
• For C++ or .NET development
• For runtimes on Windows, Linux, VxWorks

The OPC UA C++ Development Toolkits enable fast OPC Unified Architecture (UA) Server and Client development.

They provide a complete set of libraries accompanied by a simple and documented API and relevant sample applications, allowing short time to market

More info:
1. Softing’s Product Scope for OPC
2. dataFEED OPC Suite
3. OPC-Toolkits
4. Who are the typical customers?
5. Why you should buy from Softing
4. Who are the typical customers?

The dataFEED OPC Suite is sold to many types of customers. But all of them have got a need of “Process Data Management”:

**You need Process data for**

- **Improving your production output**
  - By condition monitoring (less downtimes)
  - By OEE (i.e. Overall Equipment Effectiveness)
    - ratio actual / planned output
    - ratio operating time / total time
      (identify downtimes and other time killers)
    - quality ratio good/bad output

- **Quality Management**
  - Data Logging
  - Data Backup
  - Data caching

- **Energy Management to save costs on energy**
4. Who are the typical customers?

There are no specific branches. OEE, quality management, energy management are needed everywhere in automated production. But most typical branches are

- Large food & beverage manufacturers like bottling plants (Coca Cola....)
- Pharmaceutical fabs
- Large water treatment plants
- Manufacturers with mass production of goods
- Automotive industry
1. Softing’s Product Scope for OPC
2. dataFEED OPC Suite
3. OPC-Toolkits
4. Who are the typical customers?
5. Why you should buy from Softing
5. Why you should buy from Softing

- **Softing is a dynamic and reliable partner:**
  Softing is a dynamically growing, medium-sized company with long-term experience in industrial communication since 1979. Softing offers German engineering quality and is a proud member of the strong automation industry in Germany. With its large number of installed OPC-products Softing is one of the key players in OPC worldwide. Due to this Softing is a strong partner for your projects today and in the future.

- **Softing is a member of OPC-Foundation:**
  Softing is an active member of OPC Foundation from the beginning. Due to this Softing is involved in the latest trends of OPC technology. As a result Softing OPC products are at the cutting edge of OPC.

- **With Softing you will get started easily:**
  You can download all OPC products of Softing for free for testing for a reasonable time without any functional restrictions. This way you can test the products in a detailed way before you buy them. Softing products are well documented and easy to install and to use.
Thank you for your interest!

Peter Jüngling
International Channel Sales
+49 89 45656-376
jp@softing.com

www.industrial.softing.com