

# AX-S4 ICCP

Plug-in Connections for ICCP-TASE.2



## OVERVIEW

AX-S4 ICCP (Access for ICCP) provides ICCP-TASE.2 plug-in connectivity for any Windows application supporting the popular OPC Data Access (DA) interface including many off-the-shelf SCADA, HMI and data historian products. The Intercontrol Center Communications Protocol (ICCP) is an international standard (IEC60870-6 TASE.2) for real-time data exchange between utility/ISO/TSO control centers or between control centers and power plants.

ICCP-TASE.2 is used worldwide to provide exchange of real-time data between control centers, power plants, EMS, SCADA and metering equipment within the electric and gas utility industries. Applications range from generation dispatch in open energy markets, control of aggregated demand response and data exchange in large supra-national transmission systems.

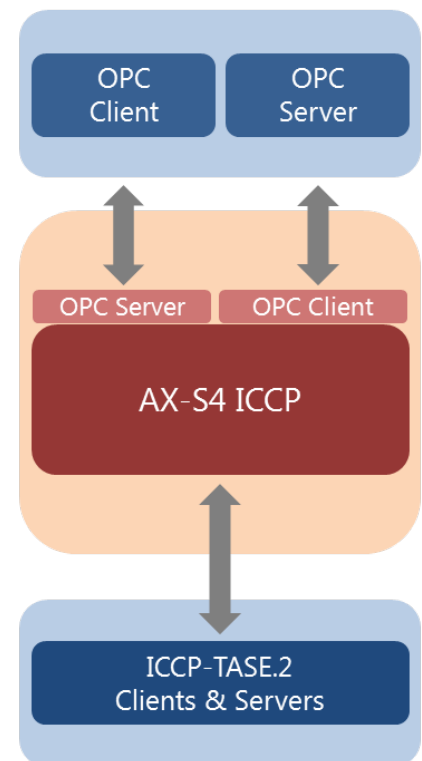
## BENEFITS

- Off-the-shelf “plug-in” ICCP-TASE.2 connectivity without programming for OPC enabled applications
- Scalable from small to large applications; No per point/tag licensing
- Low implementation cost using off-the-shelf Windows applications
- Robust interoperability with field-proven reliability

## FEATURES

- Compatible with all currently supported Microsoft Windows operating systems
- Supports Blocks 1, 2, 3, 4, & 5 of ICCP as both client and server via OPC DA V3.0 client and server interfaces
- Supports IEC 60870-6 TASE.2 V1996-08 and V2000-08 with millisecond timestamps and all changes reported features
- Supports redundant configurations with automatic or manual failover
- Includes easy-to-use GUIs to support automated configuration functions and monitoring for simplified installation, setup and debug
- Spreadsheet import/export of configuration to support large systems
- Optional IEC 62351-4 security extensions available

## AX-S4 ICCP ARCHITECTURE



## OVERVIEW

The optional Security Extensions enable secure communications using SISCO's AX-S4 ICCP product. These extensions can be overlaid on the standard version of AX-S4 ICCP to add the capability of supporting TLS encryption and strong application-level authentication based on IEC 62351-4 standards and NERC recommendations for securing ICCP-TASE.2.

## BENEFITS

- Encryption of data provides added security to ICCP-TASE.2 systems by preventing eavesdropping of critical real-time data
- Configurable, periodic symmetric key renegotiation makes breaking of encryption keys impractical for long-lived associations
- Strong authentication uses multiple 1024/2048-bit digital certificates during connection establishment to prevent unauthorized access via spoofing of remote computers
- Configurable cipher selection provides flexibility to tailor security profile to individual needs
- Uses Windows certificate store for digital certificates for compatibility with certificate management tools

## FEATURES

- Provides support for strong authentication and encryption using digital certificates per IEC 62351-4 and NERC recommendations
- Supports simultaneous communications over secure and normal associations with or without strong authentication or encryption for both ICCP-TASE.2 clients and servers
- 1024/2048-bit asymmetric keys used for certificates and to establish encrypted communications between nodes for symmetric key exchange
- Security extensions for AX-S4 ICCP are available separately or can be purchased bundled with an AX-S4 ICCP license
- Security configuration utility enables selection and management of certificates used for ICCP-TASE.2 links
- Uses Transport Layer Security (TLS) and OpenSSL for encryption and certificate functions
- Exportable to most countries in compliance with encryption regulations

