

# Msdo, Sps, Ops, Psd, OpsF, PsdF, OpsF, PsdF

MODELS



## Operations Viewer and Server Product Data



- Pre-engineering operator interface
- System wide information available
- Open connectivity
- Integrated development environment

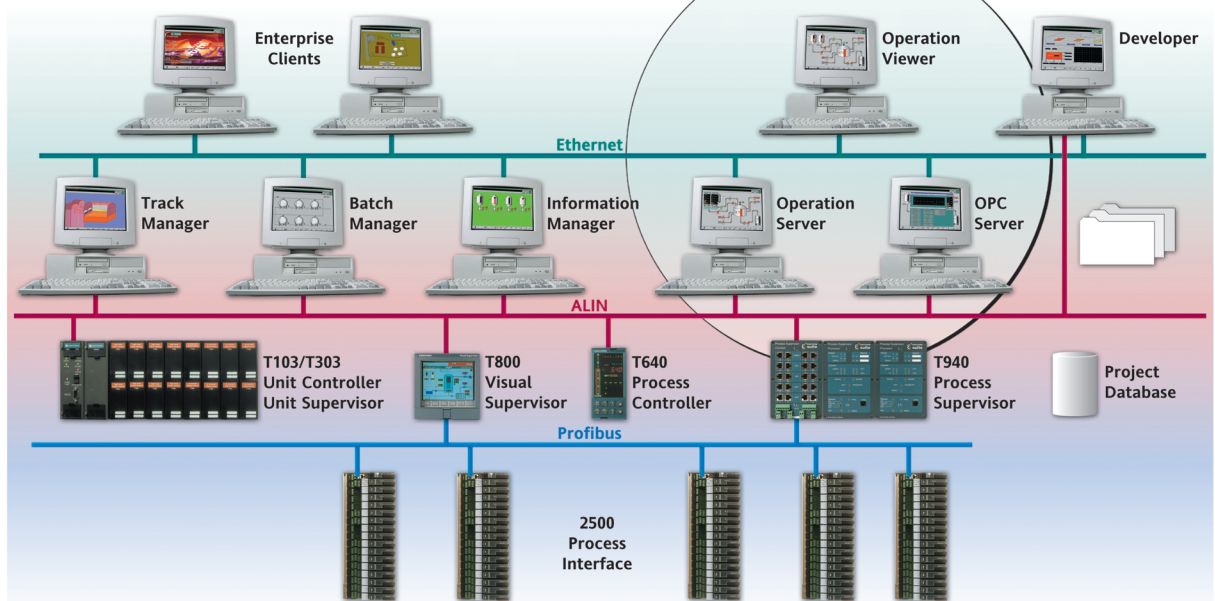
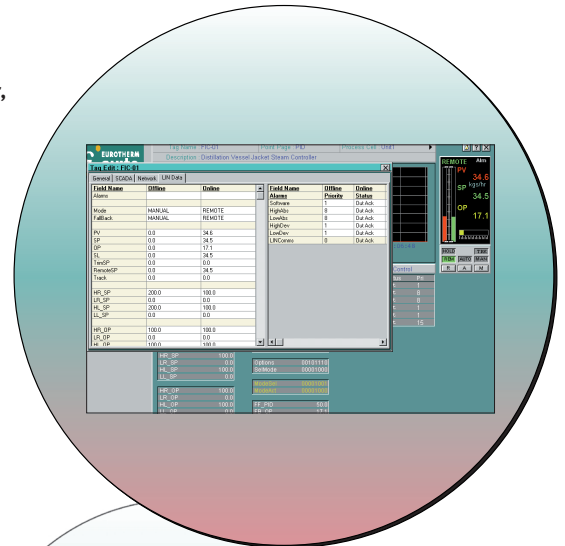


EUROTHERM

CONTROLS  
DATA MANAGEMENT  
PROCESS AUTOMATION

## OPERATIONS VIEWER AND SERVER

- A pre-engineered 'works out of the box' operator application based on Wonderware InTouch
- Full system wide availability of all control data
- Client/server architecture with master/back-up servers
- Integrated Development Environment including autoconfiguration techniques
- Open I/O and system network using serial, Ethernet and ARCnet
- Supports LIN, Modbus and OPC server connectivity with in-built communications error detection
- Defined display structure incorporating alarm banner, button bar, fascias and engineering point pages
- Support for foreign languages
- Sophisticated alarm functionality including alarm history
- Microsoft SQLServer™ relational database and acknowledgement from any viewer,
- Project database provides common system data repository
- Tag browsing to all LIN objects throughout control network
- Comprehensive user authorisation and security
- Easy to configure and deploy multiple computer nodes
- Provided as part of EurothermSuite



Operations Server and Viewer are supplied as part of the EurothermSuite software solutions. Operations Server provides server connectivity between the LIN control network and the plant enterprise network. Operations Viewer provides a defined interface using Wonderware InTouch and allows data distribution across geographical and organizational boundaries. Applications can be deployed across the network and

simple to implement distribution features eliminates the need to duplicate data within each node.

To simplify configuration and testing, a fully engineered and tested Wonderware InTouch application is supplied including operator displays, trending, alarming and user-centric security.

## OPERATIONS VIEWER FEATURES

Operations Viewer software is designed to provide data to different functional people such as operators, engineers, supervisors and managers, in a fast and meaningful way. The simple to use display structure provides a fast and intuitive HMI and consists of a pre-engineered Wonderware InTouch client application.

The operator view is based on a defined screen format of three areas containing:

**Alarm banner** – permanent view of the last two alarms and any alarm group with a current alarm.

Clicking on the alarm group will bring up the summary for that plant area.

**Current display** – displays current mimic and pop up windows with operator fascias, engineering point pages and on-line help

**Soft function button selection** – provides one click selection to:

**Overview** – direct access to a defined display page.

**Process Cell** – fast access to display pages defined as process cell overview pages

**Operator Pages** – each operator can build group of tag fascia pages from a common tag browser.

**Alarms History** – displays all alarms and events with buttons to limit view. All alarms are stored directly into a relational database which can be viewed and queried on-line.

EventTime	AlarmGroup	AlarmType	Description	TagName	Limit Value
25 Feb 2002 14:31:59	ACK_ALM	Lo	Distillation Vessel Agitator	NFC1-01	5.00
25 Feb 2002 14:31:58	OPR	none	[EPAPCM0488] NFC1-01.Alarm.Lo.w		0.00 Acknowledge
25 Feb 2002 14:29:46	LoC	Mode	EPAPCM0488 Starting Op.	Logic	0.00 none
25 Feb 2002 14:15:51	ACK_ALM	Clea		NO_PROD	0.00
25 Feb 2002 14:15:34	ACK_ALM	Clea		OP_PROD	0.00
25 Feb 2002 14:15:29	ORACK_ALM	Clea		VFI_POOH	0.00
25 Feb 2002 14:15:29	ORACK_BTN	Rs		TEMP2	60.00
25 Feb 2002 14:15:29	ORACK_BTN	Rs		TEMP2	60.00
25 Feb 2002 14:15:27	ORACK_ALM	Lo	Distillation Vessel Agitator	NFC1-01	5.00
25 Feb 2002 14:17:51	ACK_BTN	HLDP	Distillation Vessel Agitator	NFC1-01	15.00
25 Feb 2002 14:17:35	ACK_ALM	HLDP	Distillation Vessel Agitator	NFC1-01	15.00
25 Feb 2002 14:15:51	ACK_BTN	LoDP	Distillation Vessel Agitator	NFC1-01	15.00
25 Feb 2002 14:15:34	ACK_ALM	LoDP	Distillation Vessel Agitator	NFC1-01	15.00
25 Feb 2002 14:15:34	ACK_ALM	LoDP	Distillation Vessel Agitator	NFC1-01	15.00
25 Feb 2002 14:15:34	ACK_ALM	LoDP	Distillation Vessel Agitator	NFC1-01	15.00
25 Feb 2002 14:15:34	ACK_ALM	Clea	Distillation Vessel Agitator	NFC1-01	15.00
25 Feb 2002 14:15:29	ORACK_BTN	Lo	Distillation Vessel Agitator	NFC1-01	5.00
25 Feb 2002 14:15:29	OPR	administrator	[EPAPCM0488] VFI_POOH.Alarm.Clea.w		0.00 Acknowledge
25 Feb 2002 14:15:10	OPR	administrator	[EPAPCM0488] NFC1-01.Alarm.Lo.w		0.00 Acknowledge
25 Feb 2002 14:11:04	ORACK_ALM	Comm		01_BATCH	0.00

**Trends** – access to real-time and historic trends. Operator can configure up to 8 points per trend group. All data can be trended and viewed. Optionally, with Information Manager, trend data is available with a Microsoft SQLServer™ relational database.

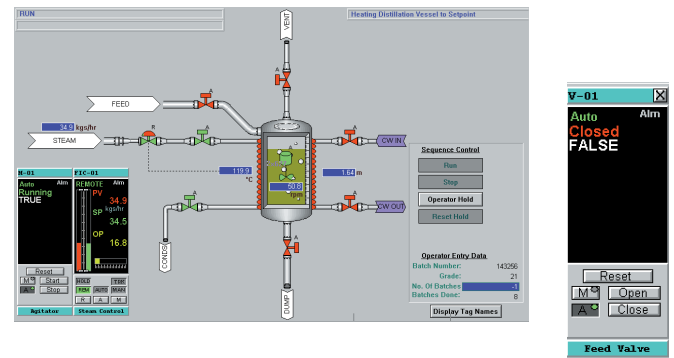
**Security login** – user login restricts access to displays and tag writes. Supports autologout.

**Display navigation** Previous, Next Up, Down, Last, Mimic menu to page through user mimics.

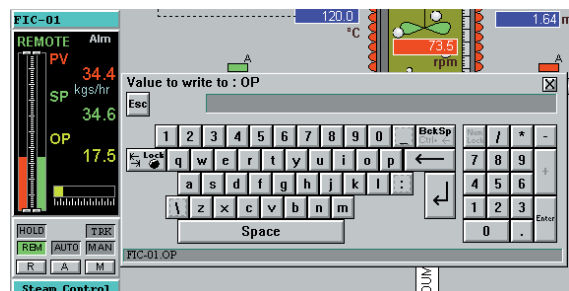
**Mimics** – all features of Wonderware InTouch and additional special icon wizards.



**Point Page** – select engineering point pages with additional pop windows including help and tag edit functionality.



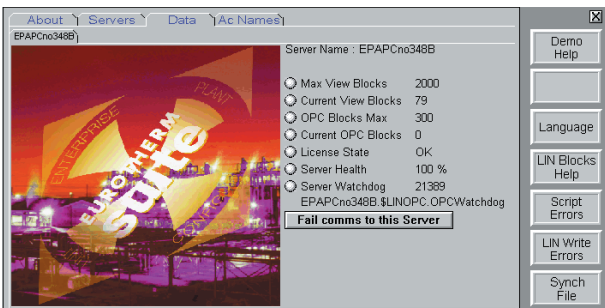
Field Name	Offline	Online	Field Name	Offline	Online
Alarms			Software	1	Out Ack.
Mode	MANUAL	REMOTE	HighAbs	0	Out Ack.
FailBack	MANUAL	REMOTE	LowAbs	0	Out Ack.
PV	0.0	34.5	LowDev	1	Out Ack.
SP	0.0	34.5	LINCross	0	Out Ack.
OP	0.0	17.1			
SL	0.0	34.5			
TempSP	0.0	0.0			
RemoteSP	0.0	34.5			
Track	0.0	0.0			
HR_SP	200.0	100.0			
LR_SP	0.0	0.0			
HL_SP	200.0	100.0			
LL_SP	0.0	0.0			
HR_OP	100.0	100.0			
LR_OP	0.0	0.0			
HL_OP	100.0	100.0			
LL_OP	0.0	0.0			



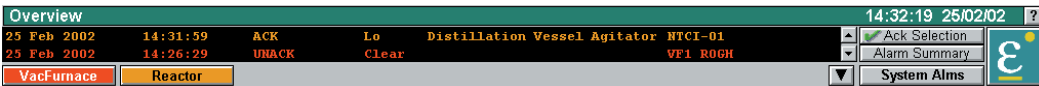
## OPERATIONS SERVER FEATURES

Operations Viewer/Server structure is a client/server architecture with specialised interfaces to provide fast and efficient alarm and real-time data transfer from control nodes to HMI screens. Operations Server provides direct connection to the control network supporting Ethernet TCP/IP stack, ARCnet and serial connections. Control network protocol support include Eurotherm LIN and Modbus.

**High Performance I/O server** Access to all control data is available via FactorySuite 2000 SuiteLink I/O server. Optionally data is also available via OPC and DDE. All tag block data is accessible with software license limiting the maximum number of blocks accessible at one time to 75, 150, 300, 1000 or 2000.



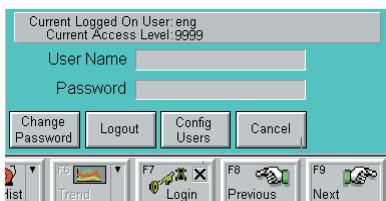
**Alarm Provider** An alarm provider controls the distribution of all block alarms to provide alarm banner and summary displays, alarm printing and alarm history. Support for master/backup server functionality is available. Diagnostic displays are in-built.



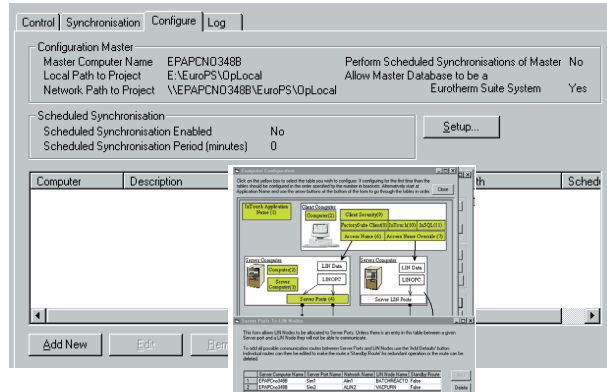
**Configuration** – all configuration and system data is defined within the project database removing the need for any duplication of configuration at the HMI nodes

**Data integrity** – with access to data quality and server watchdog indication, automatic data failure is displayed at the operations viewer screen

**Data security** – all write access to control data is handled at the server which uses the defined security access to authorise allowed access



**Computer configuration** – easy to configure multiple computer node systems by defining computer names and function (client or server)



**System control** – utilities to startup and shutdown complete application. Deploy and synchronization techniques allow remote nodes to be controlled

**LINOPC** Controls all client access to control network and includes OPC server functionality allowing access from any third-party OPC client

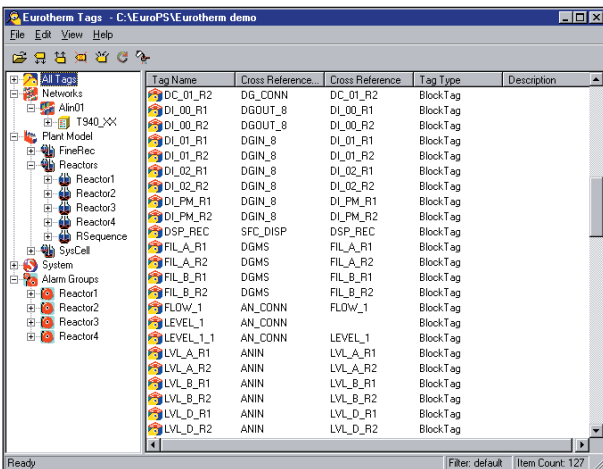
## PROJECT DATABASE AND NAMESPACE

The complete system definition is defined and built within a project namespace and stored in a Project Relational Database. By distributing this database to each Operations Viewer and Server node, a simple and easy way of configuring a multi-node system is achieved.

This integrated development environment provides:

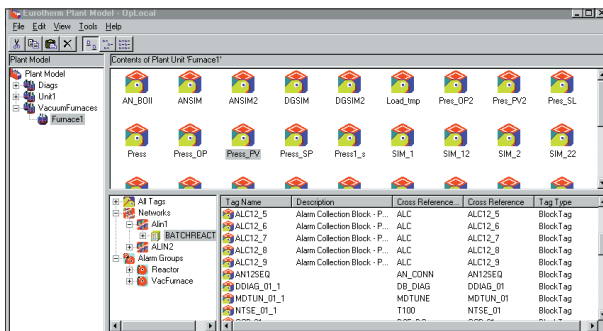
**Project Namespace (Environment)** – windows explorer structure with defined files and folders. Allows more than one person to work on a project. The Operations Server runs defined active project.

**Single Point of Entry** – use of configuration tools provides update automatically into the central relational database

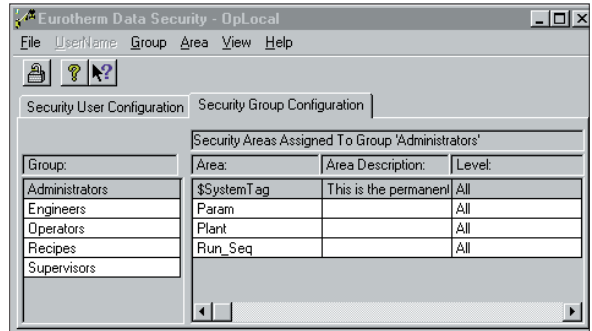


**Centralised Tag list and browser** – list of all tags and associated data fields available in a number of different views – all tags, network, plant model and alarm groups.

**Plant model analysis and definition** – S88 based structured view of cells/units/control modules and tags.



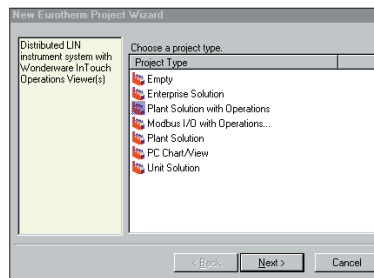
**Security configurator** – security definition of groups and users.



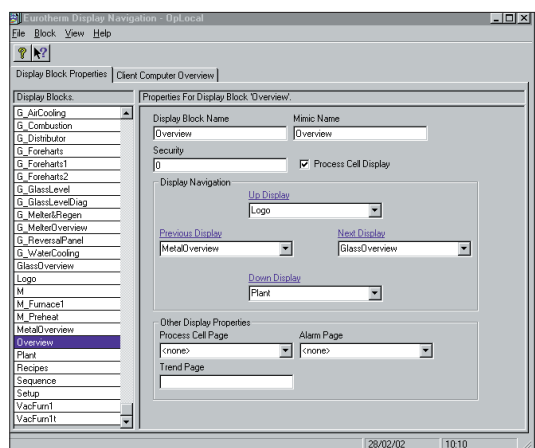
**I/O Allocator** – assigns tags to 2500 I/O bases.

**Comprehensive Reports** – configured from SQL queries and forms.

**New Project** – create different project shells. Plant Solutions project provides complete Wonderware InTouch application including display mimics and tag definitions.



**Display navigation** – defines screen navigation

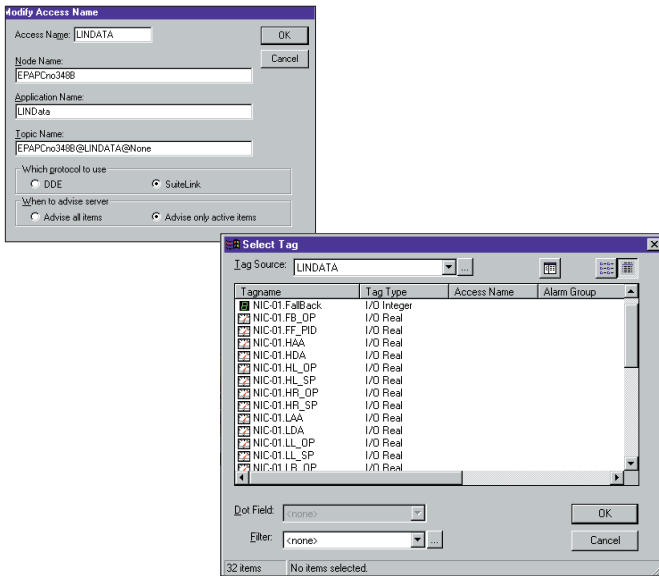


**Alarm Groups** – browse tags and plant units to define alarm groups.

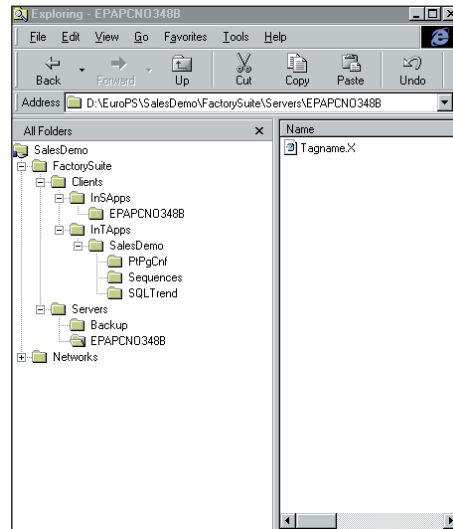
## WONDERWARE FACTORYSUITE2000 COMPATIBILITY

Operations Server is a fully engineered and working Wonderware InTouch application that provides additional features and functionality as detailed in this specification. As standard Wonderware InTouch is supplied, the Operations Server system will seamlessly integrate with any other FactorySuite2000 application in the normal documented way. This connection is achieved using an ACCESS name and a list of tag names (file TAGNAME.X)

Example of an ACCESS name setup is shown, where LINDATA is the name of the SuiteLink I/O server, and the default topic name is required but ignored by the I/O driver.



The Tagname.X resides in the project namespace and contains a list of all tag names and fields in the project database.



All of the software for Operations Viewer and Server, including Wonderware InTouch, is provided on the EurothermSuite CD. Simple to use installation will load all of the software needed onto the appropriate computer.



## EUROTHERM LIMITED

<http://www.eurotherm.co.uk>

### UK SALES OFFICE

**Eurotherm Ltd**  
Faraday Close Durrington Worthing  
Worthing BN13 3PL United Kingdom  
Tel. +44 (0)1903 205277 Fax +44 (0)1903 236465  
Email [info@eurotherm.co.uk](mailto:info@eurotherm.co.uk)

### US OFFICE

**Eurotherm**  
741-F Miller Drive  
Leesburg VA 20175-8993  
Tel. 1-703-443-0000 Fax 1-703-669-1300  
Web [www.eurotherm.com](http://www.eurotherm.com) Email [sales@eurotherm.com](mailto:sales@eurotherm.com)

© Copyright Eurotherm Limited 1999, 2000, 2002

All rights are strictly reserved. No part of this document may be reproduced, modified, or transmitted in any form by any means, nor may it be stored in a retrieval system other than for the purpose to act as an aid in operating the equipment to which the document relates, without the prior written permission of Eurotherm limited.

Eurotherm Limited pursues a policy of continuous development and product improvement. The specifications in this document may therefore be changed without notice. The information in this document is given in good faith, but is intended for guidance only. Eurotherm Limited will accept no responsibility for any losses arising from errors in this document.

