



Products

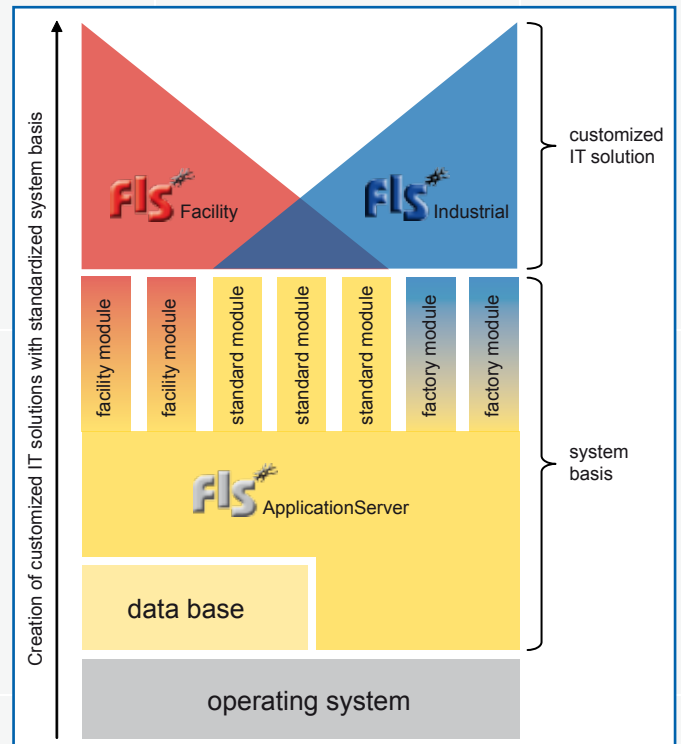
The FIS# ApplicationServer

The tool for the integration of building and industrial automation

FIS# is a **modular, scalable application server** that provides all necessary functionalities for a **custom fit IT solution between ERP (Enterprise Resource Planning) and the automation level**. The application server developed by HERMOS is based on the **global standards of the Microsoft Windows Server System** (Microsoft Windows, .NET and Microsoft SQL server database).

The goal is to offer the customer **open IT solutions** and therefore the preconditions for **long term solution methods**. With the FIS# ApplicationServer HERMOS serves the entire requirement width of **automation from building technology to industrial systems and machines**.

Standard modules like the graphic user interface and user administration, alarm and event management, the trending tool, professional reporting or the different communication components are the system base. **Branch specific standardized project libraries** (facility / factory modules) support the project planning when creating customized IT solutions for the clients (e.g. tobacco, semiconductor, facilities, utilities, etc.). Typical **facility modules** are meter readings, service management or system bench marking. Typical **factory modules** are operational and machine data reading, recipe management or production planning and manufacturing management. The created solutions are characterized by **individual configurations consisting of standard, facility and factory modules**. Extension and fine tuning of the configuration is done through **customer specific programming**.

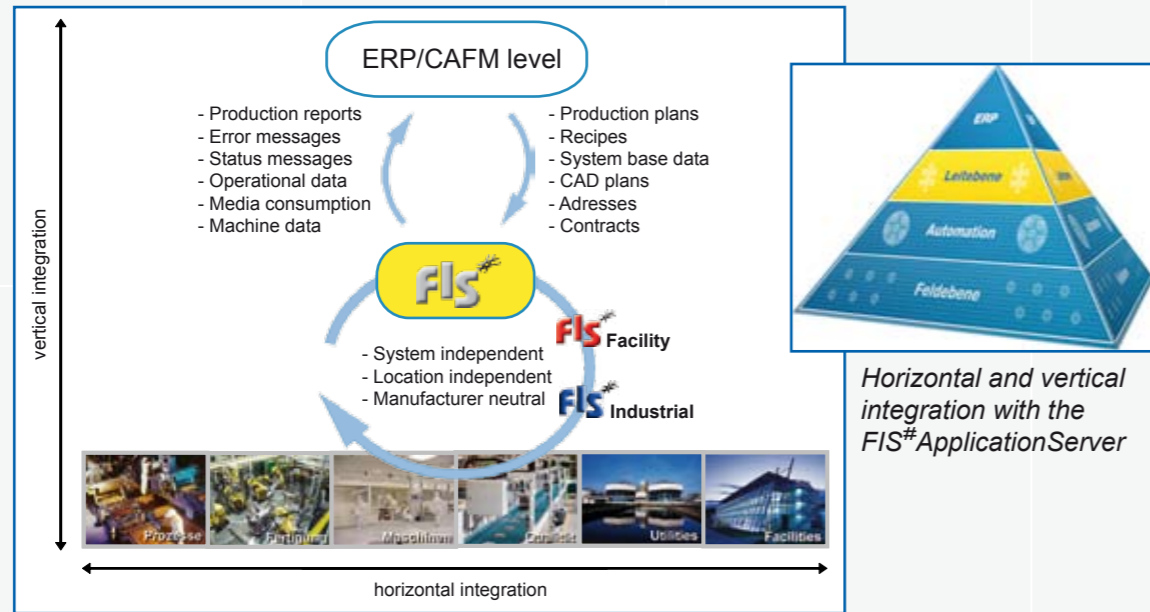


With the FIS#ApplicationServer, HERMOS conceptually serves the needs of **two application areas**:

FIS# Facility (facility and building automation)

FIS# Industrial (factory and process automation)

With the FIS#ApplicationServer, **all possibilities of horizontal and vertical integration** coming from one platform are made accessible to the customer. Expenditure on the customer side for administration and maintenance of different systems is reduced accordingly.



- > **Control of the systems**, setting of set values and parameters
Through the dialogue capable visualization possibilities, any known data point can be influenced by the user in the FIS# system.
- > **Archiving** of data point values and messages
- > **Message forwarding** and notification
Occurring messages can be forwarded to different media (printer, fax, mail and SMS).
- > **Browser supported dialogue procedure** for the processing of messages
Selected messages can be forwarded to a browser. There, multi level action catalogues can be stored ahead of time for each corresponding message. The user receives the associated action instruction when accepting the message. These instructions have to be successfully completed within the framework of a dialogue procedure; otherwise the messages are resubmitted to the system. They are then automatically displayed again in the task list of the user within an adjustable time interval. All user inputs during this procedure are stored and are available for later evaluation, analysis or tracking. The browser supported dialogue procedure for the processing of messages is used – among other things – in call centers or company control centers.

Products

Functions of the FIS# ApplicationServer

- > **Connection** of a wide array of different **technical systems** of different manufacturers
When doing this, the FIS# drivers translate the communication protocols used in the systems into a protocol understandable by FIS# and vice versa. This is how they allow access to data and information from the corresponding systems.
- > Structuring of the integrated systems in the **navigation** view
When doing this, the structuring can occur according to different factors and can occur several times (e.g. according to trade and location).
- > Processing and standardization of **data point values** (filter, scale, convert etc.)
- > **Alarm and error management**, limit value monitoring
- > **Visualization** of current system states in different form:
 - Message list
Returns states and event concerning the system in text form.
 - Message history
Returns archived messages and therefore historic states and event in text form.
 - Value list
Tabular display of data point values.
 - Value history
Tabular display of archived data point values.
 - Trends
Value development displayed in line graphs on basis of archived and current values;
Comparison and contrasting of value development of one data point over two time axes offset to one another.
 - Graphics
Display of the current system states in form of – among others – animated graphics, whereas the animation is controlled by the data from the system.

Selektieren	W	Gegeben	Gültig	Text	Wert	Gültig von
		20.04.2006 15:49:33		Die Temperatur (Variable "Luft_VL_Temp") hat das Grenzwert unterschritten	Wärmung	
		20.04.2006 15:49:19		Gebäude 1: Zu Aalheranlage: Turge-Kühler	Stehab	
		20.04.2006 15:49:19		Gebäude 1: Heizungsanlage: Schwergut-SFD 0007	Stehab	
		20.04.2006 15:49:19		Gebäude 1: Heizungsanlage: Kessel 1: in Betrieb	Stehab	
		20.04.2006 15:49:19		Gebäude 1: Heizungsanlage: Kessel 1: in Betrieb	Stehab	
		20.04.2006 15:49:13		Gebäude 1: Endgeräteelektroheizung Raum 06 Fliese 2 ein	Stehab	
		20.04.2006 15:49:11		Gebäude 1: Endgeräteelektroheizung Raum 06 Fliese 1 ein	Stehab	
		20.04.2006 15:49:04		Gebäude 1: Zu Aalheranlage: Lüfter A04	Stehab	
		20.04.2006 15:49:04		Gebäude 1: Zu Aalheranlage: Lüfter A04	Stehab	
		20.04.2006 15:49:00		Die Filterzeit des Ausgleichsbehälters (Variable "Soll-Abdruck") ist zu hoch	Wärmung	
		20.04.2006 15:47:49.20.04.2006 15:49:18		Gebäude 1: Heizungsanlage: Kessel 1: Steigung Brenner	Stehab	

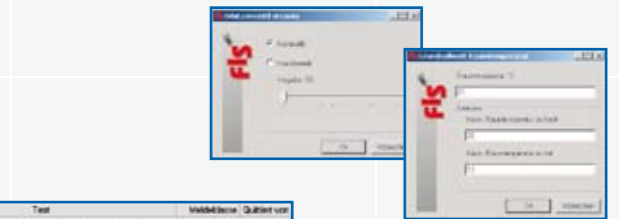
Message list

Selektieren	W	Gegeben	Gültig	Text	Wert	Gültig von
		20.04.2006 15:45:23		Die Filterzeit vom Tank (Variable "Tank-Frozent") ist zu niedrig (18 %)	Wärmung	
		20.04.2006 15:45:18		Die Temperatur (Variable "Luft_VL_Temp") hat das Grenzwert unterschritten	Wärmung	
		20.04.2006 15:44:58		Die Filterzeit des Ausgleichsbehälters (Variable "Soll-Abdruck") ist zu hoch	Wärmung	
		20.04.2006 15:44:03		Gebäude 1: Heizungsanlage: Kessel 1: Steigung in Betrieb	Stehab	
		20.04.2006 15:42:21		Gebäude 1: Zu Aalheranlage: Steigung Erdbeheizung	Stehab	
		20.04.2006 15:44:49		Gebäude 1: Zu Aalheranlage: Purze Lüfter	Stehab	
		20.04.2006 15:44:03		Gebäude 1: Zu Aalheranlage: ist gestört	Stehab	
		20.04.2006 15:44:04		Gebäude 1: Zu Aalheranlage: Lüfter A04	Stehab	
		20.04.2006 15:42:49		Gebäude 1: Zu Aalheranlage: Steigung Act	Stehab	
		20.04.2006 15:44:04		Gebäude 1: Zu Aalheranlage: in Betrieb	Stehab	
		20.04.2006 15:44:58		Die Filterzeit vom Tank (Variable "Tank-Frozent") ist zu niedrig (18 %)	Wärmung	

Message history

Datumzeit	W	Datenpunkt	Wert	Erreignet
31.03.2005 17:50:21		Wassersäher Bewässerung gesamt	2350,9	0
31.03.2005 17:50:21		Wassersäher Bewässerung gesamt	2350,9	1
31.03.2005 17:50:21		Wassersäher Regen gesamt	1932,2	0
31.03.2005 17:50:21		Wassersäher Regen gesamt	1932,2	0
31.03.2005 16:19:22		Wassersäher Bewässerung gesamt	2350,9	0
31.03.2005 16:19:17		Wassersäher Bewässerung gesamt	2305,53	0
31.03.2005 16:18:26		Wassersäher Bewässerung gesamt	2053,76	1
30.03.2005 19:58:55		Wassersäher Bewässerung gesamt	2053,76	0
30.03.2005 19:58:54		Wassersäher Bewässerung gesamt	2005,43	0
30.03.2005 19:58:50		Wassersäher Bewässerung gesamt	2005,43	0
19.03.2005 11:49:12		Wassersäher Bewässerung gesamt	2005,43	0
19.03.2005 11:49:12		Wassersäher Bewässerung gesamt	2005,43	0
19.03.2005 11:49:11		Wassersäher Bewässerung gesamt	2005,43	0
19.03.2005 11:49:11		Wassersäher Bewässerung gesamt	2005,43	0
17.03.2005 11:21:16		Wassersäher Bewässerung gesamt	2005,43	0
17.03.2005 10:13:11		Wassersäher Bewässerung gesamt	2005,43	0
17.03.2005 09:58:53		Wassersäher Bewässerung gesamt	2005,43	0
17.03.2005 09:58:54		Wassersäher Bewässerung gesamt	2005,43	0
17.03.2005 09:36:14		Wassersäher Bewässerung gesamt	2005,43	0
17.03.2005 09:36:14		Wassersäher Bewässerung gesamt	2005,43	0

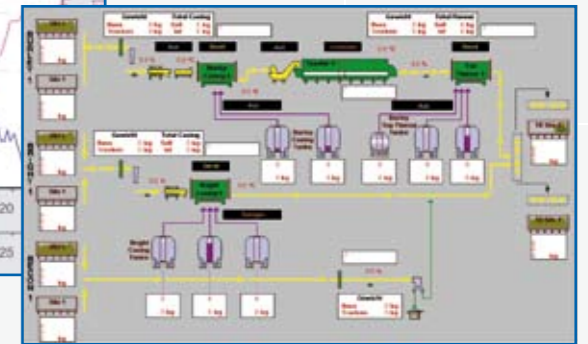
Value history



Control dialogues

Name	W	Wert	Datumzeit	Erreignet	IC	Werte
Auflerentemperatur		5,39 °C	20.04.2006 16:59:32	StA		
Heizung Rücklauftemperatur primär		59,46 °C	20.04.2006 16:59:32	StA		
Heizung Rücklauftemperatur sekundäre Seite		59,81 °C	20.04.2006 16:59:32	StA		
Heizung Vorlauftemperatur primär		74,89 °C	20.04.2006 16:59:32	StA		
Heizung Vorlauftemperatur sekundäre Seite		67,36 °C	20.04.2006 16:59:32	StA		
Korndirektlufttemp. min		20,00 °C	20.04.2006 16:59:53	StA		
Korndirektlufttemp. max		15,00 °C	20.04.2006 16:59:53	StA		
Korndirektlufttemp. min		25,00 °C	20.04.2006 16:59:53	StA		
Korndirektlufttemp. max		25,00 °C	20.04.2006 16:59:53	StA		
Kessel Brenner		Run	20.04.2006 16:59:53	StA		
Kessel Brenner		Auto	20.04.2006 16:59:53	StA		
Kessel Rauchgasempore		70,13 °C	20.04.2006 16:59:53	StA		
Kessel Substrat (Aktuell)		63,35 °C	20.04.2006 16:59:53	StA		
Kessel Substrat (Grenzwert)		62,39 °C	20.04.2006 16:59:53	StA		
Kessel Substrat (Hydrogabel)		23,00 °C	20.04.2006 16:59:53	StA		
Kessel Vorlauftemp.		64	20.04.2006 16:59:53	StA		
Kessel Vorlauftemp. max. Einströmung		72,09 °C	20.04.2006 16:59:53	StA		

Value list



The advantages of FIS# ApplicationServer

- > **Manufacturer independent**
Connection of a wide array of automation protocols via the FIS# drivers. Proven and tested standards like S7, TwinCAT ADS, BACnet, LON or OPC are used as well as protocols specifically designed to the system. The family of FIS# drivers is expandable at all times.



> High performance **data point implementation**

A wide array of data types are supported, for example data types of the SNVT-Masterlist, .NET data types as well as FIS# internal data types. Latter data get, according to physical categorization (e.g. temperature) the corresponding units to ease all possible conversion calculations related to the data type (e.g. from Kelvin into degrees Celsius)

> Implemented **filters**

For processing and/or scaling the data point values, a wide array of filter functions is integrated into the FIS# system. The family of filters is expandable at all times.

> **Export** options

All data existing in the FIS# system can be made available to external applications. Through export functions, all data can be saved in different target formats (xml, csv, txt). Therefore it is possible, to export data from the FIS# system with the push of a button and to process them with external applications (e.g. MS-Excel).

> Provision of **data for external control systems**

All data existing in the FIS# system can be forwarded to other control systems via the implemented OPC server. When doing this, the external systems use the manufacturer independence of FIS# and can in this way access the systems that can otherwise not be integrated into different control technology.

> **Interfaces** to external applications

The data existing in the FIS# system are made available to ERP systems (e.g. SAP or DynamicsNAV) and CAFM systems (e.g. pit-FM). The external applications use the data and information subsequently for calculation of incidental expenses, in production planning and control, in maintenance and in strategic company planning etc.

> Flexible **visualization** options

Each component of the user interface can be arranged freely. Views can be hidden, attached to others, divided and cascaded so that the work space is displayed in a neat and tidy fashion and that the most important visualization elements are in focus for the user.

> High performance **user and rights administration**

The user and rights administration is reminiscent of the windows user account and groups. Freely defined rights can be assigned to different views, tree positions, function calls and each variable. All FIS# internal checks for corresponding rights can be logged and visualized based on the time interval.

> Functional and comprehensive **forwarding and call up functions**

All messages occurring in the FIS# system can be forwarded to different media dependent on time, system or user; or they can be forwarded independent of classification. When doing this the media printer, SMS, e-mail, fax as well as file is supported. Active messages can be called up without the user interface. This can be done verbally as well as by telephone or in writing by e-mail.

> Individual **expandability and design** of the entire system

The functions of the FIS# system are expandable at all times (e.g. processing routings for the FIS# decoder). At the same time, visualization options can be expanded in such a way that external applications (e.g. for energy management) can be integrated into the user interface.

> **We tell you how it's done!**

HERMOS provides you with the FIS# System including documentation and training materials und thereby conveys the necessary know-how in order to upgrade existing systems and establish new systems. That is the reason why FIS# and its applications can be bought independently of HERMOS at any desired system retailer.