

Calibration Software

ISOPLAN-5

Complete Calibration Management System



PRESYS Calibration Certificate
N.: 1/2017

COMPANY: PRESYS INSTRUMENTS
INSTRUMENT: Temperature Transmitter
FUNCT.: Boiler steam output temperature
AREA: Sector-1
CRITICALITY: A

REG. NUMBER: 0720996
TAG: TT-14001
CALIBRATION PERIOD: 12 Months

TECHNICAL INFORMATION

INSTRUMENT	DOCUMENTS
MODEL: TY-2090 MANUFACT.: Presys	O.S.: SAP310117-002 PROC.: P11/01

CALIBRATION AND ADJUSTMENT

STRATEGY: 1
RANGE INPUT: RTD-Pt-100 0,00 to 100,00 (°C)
RANGE OUTPUT: Current 4,0000 to 20,0000 mA

INITIAL CALIBRATION

Calibration (°C)	Reference (mA)	Corr. Cal. (°C)	Corr. Ref. (mA)	Reading 1 (mA)	Average (mA)	Error (mA)	U (mA)	k	Accep. Crit. (mA)
0,00	4,0000	0,00	4,0000	4,0218	4,0218	0,0218	0,0008	2,000	0,1600
25,00	8,0000	25,00	8,0000	8,0232	8,0232	0,0232	0,0008	2,000	0,1600
50,00	12,0000	50,00	12,0000	11,8190	11,8190	-0,1810	0,0010	2,000	0,1600
75,00	16,0000	75,00	16,0000	15,9559	15,9559	-0,0441	0,0011	2,000	0,1600
100,00	20,0000	100,00	20,0000	19,9528	19,9528	-0,0472	0,0021	2,000	0,1600

FINAL CALIBRATION

Calibration (°C)	Reference (mA)	Corr. Cal. (°C)	Corr. Ref. (mA)	Reading 1 (mA)	Reading 2 (mA)	Reading 3 (mA)	Average (mA)	Error (mA)	U (mA)	k	Accep. Crit. (mA)
0,00	4,0000	0,00	4,0000	4,0074	4,0073	4,0063	4,0070	0,0070	0,0012	2,293	0,1600
25,00	8,0000	25,00	8,0000	8,0068	7,9912	7,9963	7,9981	-0,0019	0,0207	4,488	0,1600
50,00	12,0000	50,00	12,0000	12,0041	11,9982	11,9919	11,9981	-0,0019	0,0158	4,427	0,1600
75,00	16,0000	75,00	16,0000	16,0035	15,9810	15,9974	15,9940	-0,0060	0,0303	4,497	0,1600
100,00	20,0000	100,00	20,0000	19,9833	19,9956	19,9902	19,9897	-0,0103	0,0152	4,106	0,1600

COMMENTS:
Uncertainty was calculated using a coverage k factor of 2

CALIBRATION CONDITIONS
TEMPERATURE: 23 °C

USED STANDARDS
RTD-Pt-100 (°C) I/O: (O)

PRESYS®



Calibration Software

ISOPLAN-5

Complete Calibration Management System

Benefits

- Increases the technician efficiency.
- Facilitates the review of calibration data during an audit.
- Ensures regulatory compliance.
- Information centralized in a single system.
- Substitutes the use of Excel calculation sheets.
- Meets the requirements of FDA 21 CFR-Part 11 / GAMP.

Company Logo and customization of the certificate

Automatic certificate numbering

Record of instruments, Tags, standards, sectors, criticalities and procedures

Various calibration strategies

List of used standards

Electronic signature as requested by 21CFR Part 11

Highlights errors and uncertainties above tolerance limits.

Automatic uncertainty calculation compatible with GUM recommendations.

ISOPLAN Calibration Certificate
N.: 1/2015

COMPANY: ISOPLAN INSTRUMENTS
INSTRUMENT: Temperature Transmitter
FUNCT.: Boiler steam output temperature
AREA: Sector-1
CRITICALITY: A
REG. NUMBER: 0720996
TAG: TT-14001
CALIBRATION PERIOD: 12 Months

TECHNICAL INFORMATION

INSTRUMENT	DOCUMENTS
MODEL: TY-2090 MANUFACT.: PRESYS	O.S.: SAP310114-002 PROC.: P11/01

CALIBRATION AND ADJUSTMENT

STRATEGY: 1
INPUT RANGE: RTD-Pt-100 0.00 to 100.00 (°C) OUTPUT RANGE: Current 4.0000 to 20.0000 mA

INITIAL CALIBRATION										
Calibration (°C)	Reference (mA)	Corr. Cal. (°C)	Corr. Ref. (mA)	Reading 1 (mA)	Average (mA)	Error (mA)	U (mA)	k	Accep. Crit. (mA)	
0.00	4.0000	0.00	4.0000	4.0218	4.0218	0.0218	0.0008	2.000	0.1600	
25.00	8.0000	25.00	8.0000	8.0232	8.0232	0.0232	0.0008	2.000	0.1600	
50.00	12.0000	50.00	12.0000	11.8190	11.8190	-0.1810	0.0010	2.000	0.1600	
75.00	16.0000	75.00	16.0000	15.9559	15.9559	-0.0441	0.0011	2.000	0.1600	
100.00	20.0000	100.00	20.0000	19.9528	19.9528	-0.0472	0.0021	2.000	0.1600	

FINAL CALIBRATION											
Calibration (°C)	Reference (mA)	Corr. Cal. (°C)	Corr. Ref. (mA)	Reading 1 (mA)	Reading 2 (mA)	Reading 3 (mA)	Average (mA)	Error (mA)	U (mA)	k	Accep. Crit. (mA)
0.00	4.0000	0.00	4.0000	4.0074	4.0073	4.0063	4.0070	0.0070	0.0012	2.293	0.1600
25.00	8.0000	25.00	8.0000	8.0068	7.9912	7.9963	7.9981	-0.0019	0.0207	4.488	0.1600
50.00	12.0000	50.00	12.0000	12.0041	11.9982	11.9919	11.9981	-0.0019	0.0158	4.427	0.1600
75.00	16.0000	75.00	16.0000	16.0035	15.9810	15.9974	15.9940	-0.0060	0.0303	4.497	0.1600
100.00	20.0000	100.00	20.0000	19.9833	19.9956	19.9902	19.9897	-0.0103	0.0152	4.106	0.1600

COMMENTS:

Uncertainty was calculated using a coverage k factor of 2

CALIBRATION CONDITIONS

LOCATION: Calibration Laboratory
HUMIDITY: 55 % PRESS.: 1 atm TEMPERATURE: 23 °C

USED STANDARDS

Model: MCS-XV-4 S.N.: 001-14 Cert. N.: R002.01.14 Next Calib.: 01/15/2015 Scale: RTD-Pt-100 (°C) I/O: (O)
Model: MCS-XV-4 S.N.: 001-14 Cert. N.: C001.01.14 Next Calib.: 01/15/2015 Scale: Current (mA) I/O: (I)

MAINTENANCE TYPE AND FAILURE CODE

Preventive
007-Problem in tuning parameters

INITIAL DIAG.: Reproved **FINAL DIAG.: Approved**
CALIBRATION: 01/31/2014 **NEXT: 01/31/2015**

COMMENTS

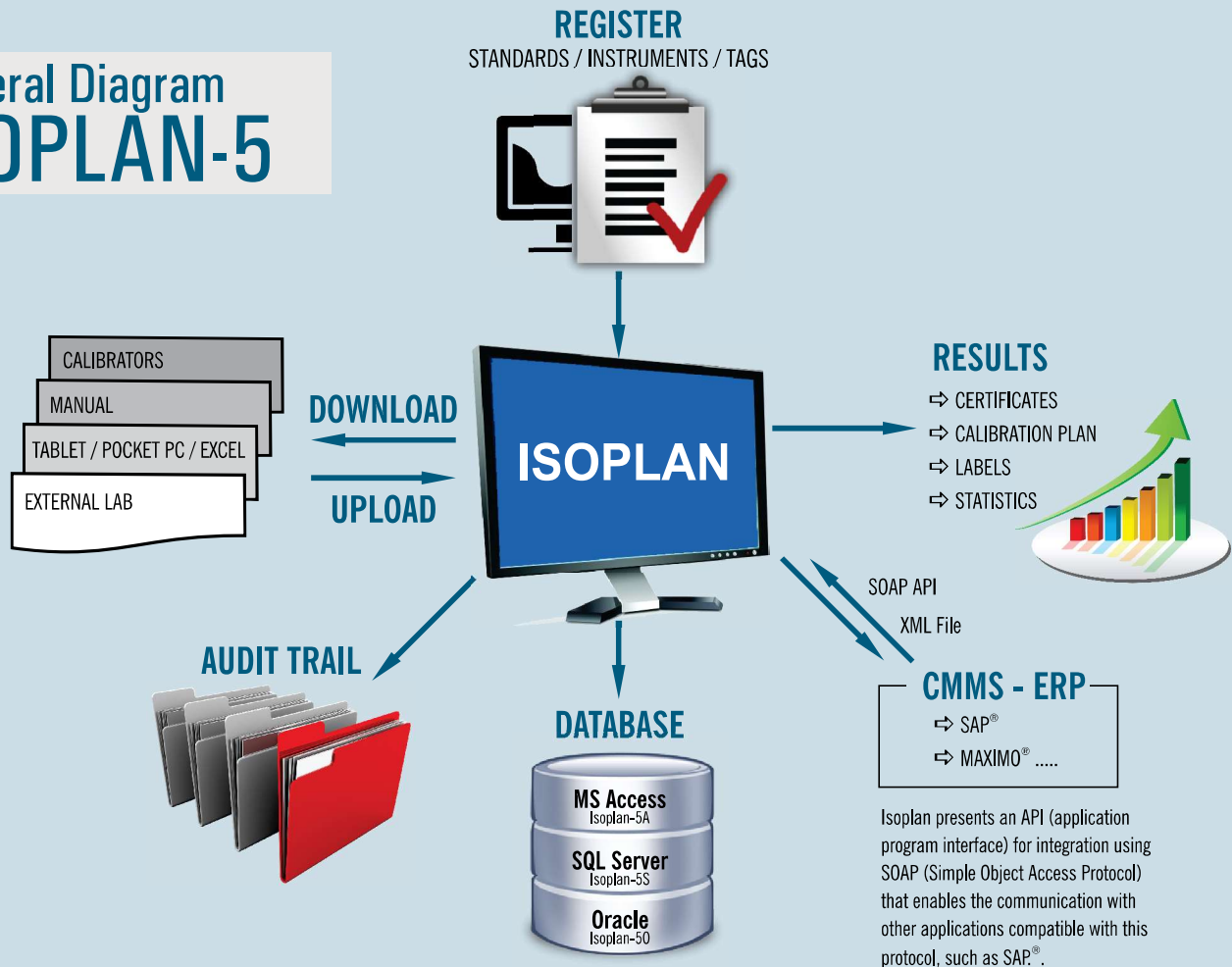
Instrument was repaired and readjusted

Operator
Jack Newton
01/31/2015 09:48:24

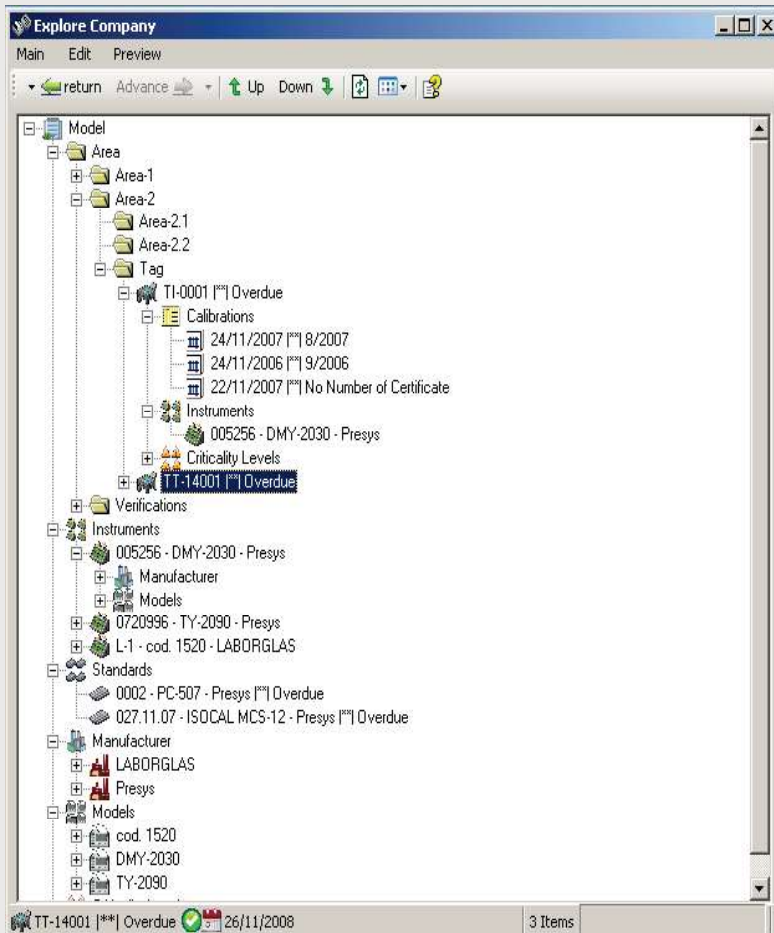
Revisor
Peter Taylor
01/31/2015 09:49:14

Responsible
John Doe
01/31/2015 09:49:57

General Diagram ISOPLAN-5



Incredibly easy to use! All major features available with a "Single Click"!



Isoplan-5 is a complete software that allows the effective management of calibrations with data protection, confidentiality and full traceability of standards, calibration history, and control of active and inactive instruments, tags and loops.

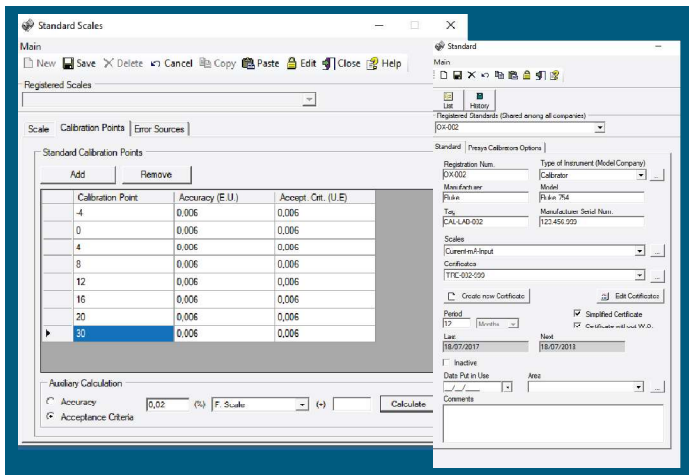
With a modern and practical navigation interface, the user has full access to all relevant information of the calibration process. With a "single click", you can view Areas, Tags, instrument calibration history and calibrations that are pending. This new feature facilitates the day-to-day work and provides technical basis for displaying data at quality audits.

Additionally, with this "Explore Company" feature, Isoplan-5 reaches a high degree of management, with a complete view of all the information, with various filters and search tools, making the metrological management more efficient and secure .

Main Distributor
PRESYS
www.presyscorp.com

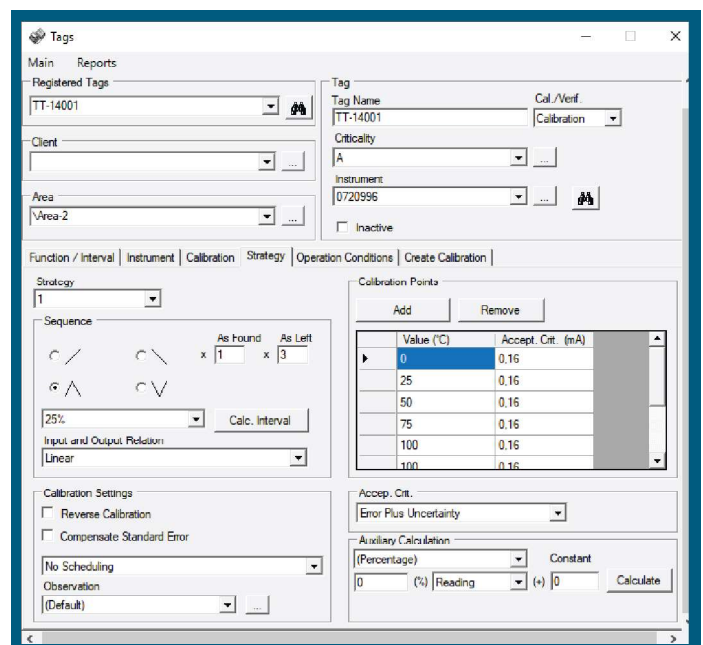
Test Standard Management

- ◆ Simplified or complete record of the test standards with scales, accuracies, data of the certificate.
- ◆ Management of calibration dates with alarms, generation of Service Order for the external laboratory and critical analysis of the data.
- ◆ Practical search of certificates data with scanned PDF file giving a fast access to all your standards certificates.



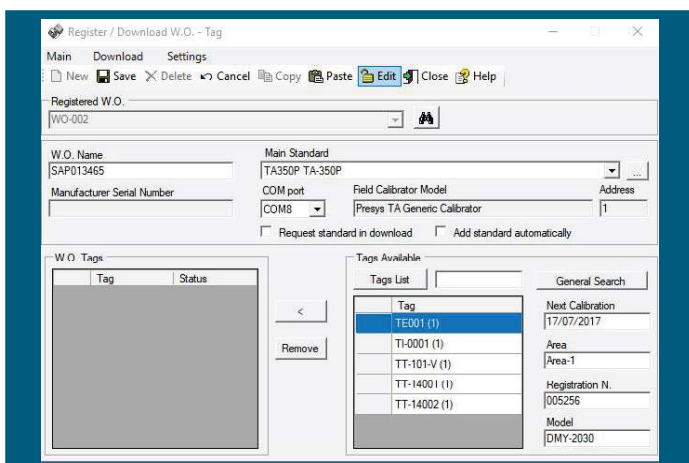
Instruments, Tags and Loops Management

- ◆ Records of the instruments, tags and loops that are commonly used in the industry with inclusion of calibration points, acceptance criteria, criticality and all relevant information needed to calibrate a Tag or Loop.
- ◆ Possibility to create a calibration order directly.
- ◆ Possibility to create a Loop including various Tag components aiming to combine multiple instruments in an unique calibration.



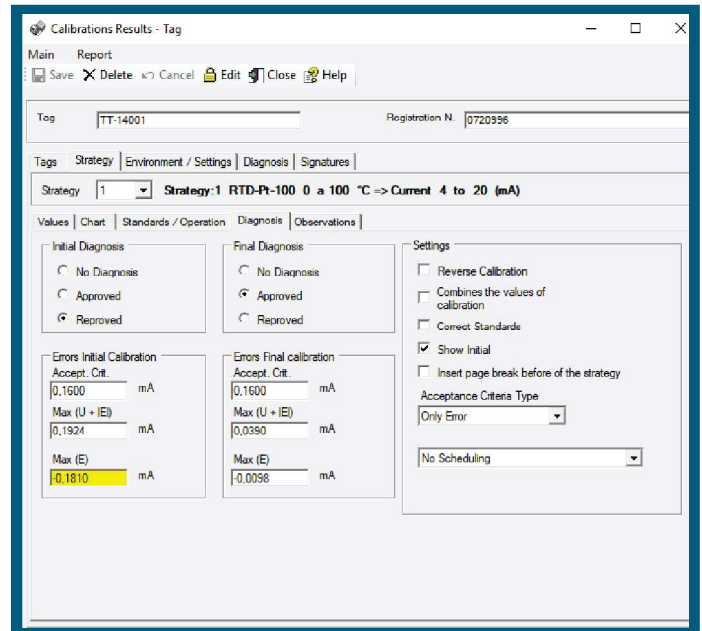
Download / Upload

- ◆ Possibility of different types of Download and Upload.
 - Manual with manual data entry of calibration data
 - For Presys Documenting Calibrator, fully-automated and paperless.
 - To External Laboratory, generation of a Service Order document that will accompanied the instrument and reception of the calibration certificate.
 - with an Excel Sheet that can be synchronized on a mobile workstation.
- ◆ Way to document an unrealized calibration and the reason the calibration did not occur.



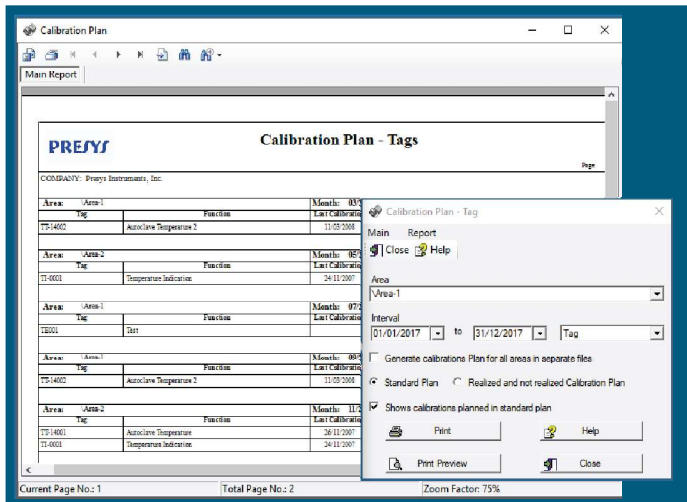
Calibration Results

- ◆ Complete analysis of the results with insertion of defects and events.
- ◆ Visualization of obtained values, as well as the standard values and the DUT, error graphs and calibration certificate.
- ◆ Automatic or manual approval, manual or electronic signature with due protections and security relative to electronic records.
- ◆ Possibility to create quickly a label.
- ◆ With Electronic Signature, reduce de paper flow and printed paper.



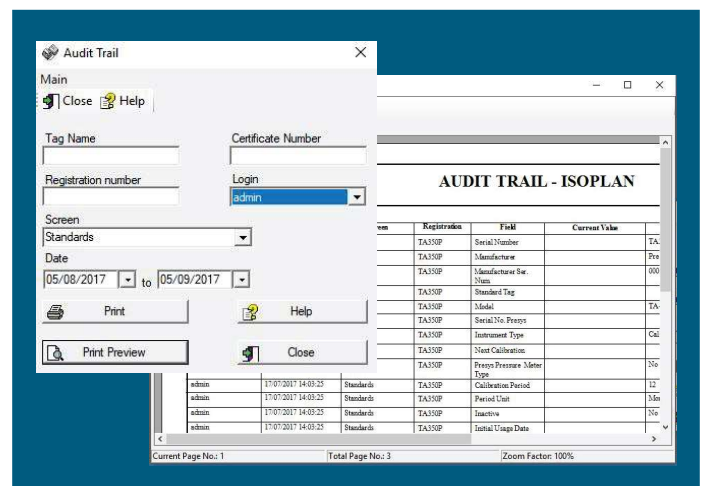
Calibration Plan

- ◆ ISOPLAN provides a tool to generate calibration plan in different types of formats and with various search filters, for all the instruments that are included in the calibration process.
- ◆ Possibility to display the KPI – Key Performance Indicators where the number of instruments to be calibrated will be highlighted, the one that were calibrated within the time limit and the one that are expired. This tool facilitates the preparation of an audit and gives a global vision of your metrological status.



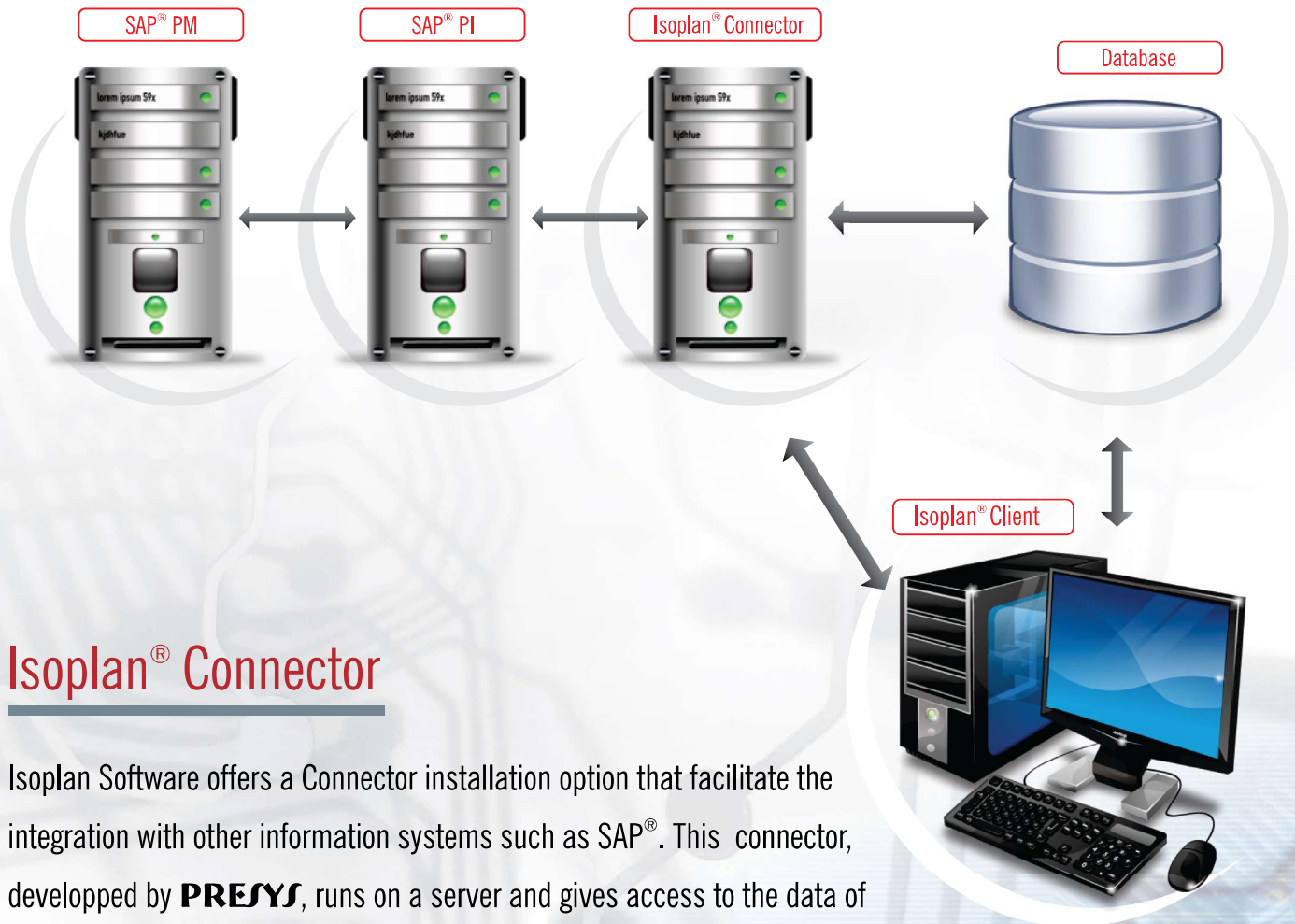
Audit Trail / FDA

- ◆ This function is necessary for companies that need to meet the 21CFR/Part 11 Requirements.
- ◆ Generation of a full audit/log report with user and operations that have been done on a TAG and/or instrument.
- ◆ All record alterations (creation, edition and delete) are registered in an Audit Tail log file.
- ◆ The Audit Trail screen allows you to do a search in this log file to get information relative to an operation done by a user during a period of time or changes that have been done in a specific windows of the software.



Integration Isoplan® SAP®

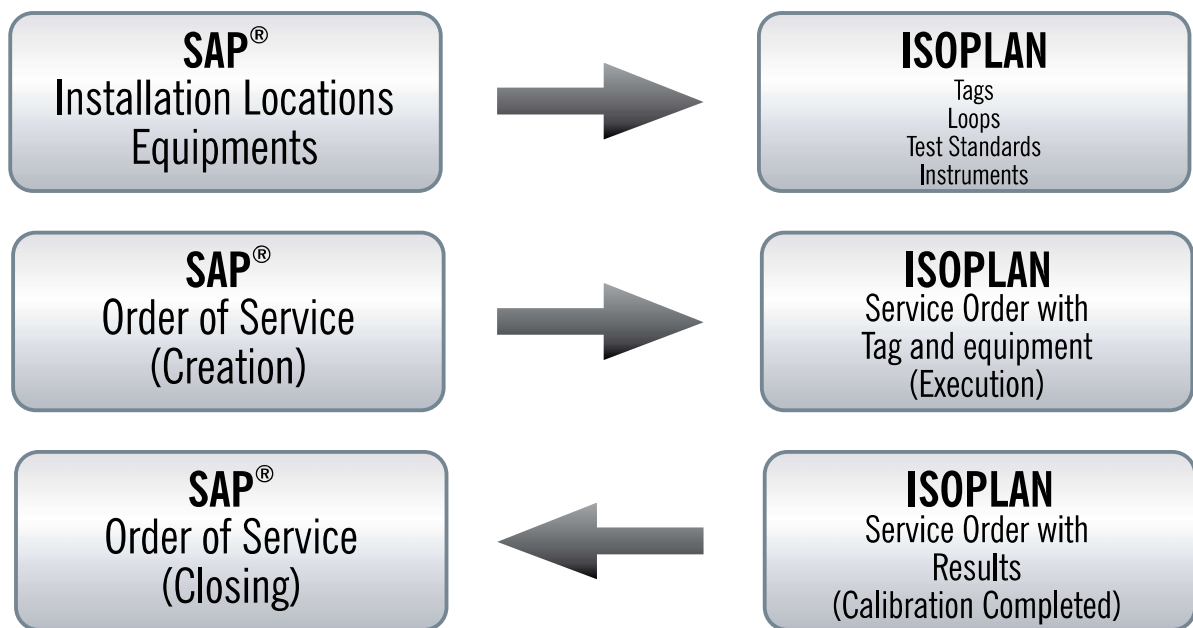
The instruments that are registered for calibration in the ISOPLAN® Software, usually are also registered in ERP systems such as SAP®. If the systems are not interconnected, data input needs to be done manually in a duplicated manner and may cause inconvenience such as a longer registration time and risk of information discrepancies between the systems increasing the overall operational costs.



Isoplan® Connector

Isoplan Software offers a Connector installation option that facilitate the integration with other information systems such as SAP®. This connector, developed by **PRESYS**, runs on a server and gives access to the data of Isoplan® through the use of an API using SOAP protocol. This protocol is compatible with information system, such as SAP® PI, and also other applications developed using Java® or .NET® programming environments. This API can be used by consultants of other systems to send and receive data from ISOPLAN®.

Isoplan® SAP® Integration



With ISOPLAN working in an integrated way with SAP, the basic register information of instruments and locations from SAP, are sent automatically in the mapped registers of ISOPLAN such as TAGs, Loops, Standards or Instruments.

The ISOPLAN user will need to complete the received information from SAP with specific data needed to execute the calibration in ISOPLAN such as the calibration points, the acceptance criteria, specific data of the standard.

The Work Order of SAP also can be send to ISOPLAN and will be waiting for execution by the calibration team that will finalize the calibration service. The calibration results, calibration execution time, final calibration data, work order service number and generated calibration certificate number can be read by SAP through the API integration, improving the productivity and reducing closing time of work orders in SAP.

Benefits of Integration

- ✓ Unique register of installation locations and equipments avoiding re-entering data into two systems.
- ✓ Calibration Work Orders sent automatically to Isoplan®.
- ✓ Synchronization of calibration data for fast closing of SAP® Service orders.
- ✓ Data integrity between and safe data communication between the systems.
- ✓ Solution can be customized to meet customer requirements.
- ✓ Audit/Log of all data transfers between the systems

Licences and Options

ISOPLAN-5A-Light

Licence Limited to 500 Tags,
Access Type Database

ISOPLAN-5A

Full Licence, Access Type Database

ISOPLAN-5S

One Floating Full Licence, SQL Database

ISOPLAN-5O

One Floating Full Licence, Oracle Database

**FDA CFR Part11 Option,
includes Audit Trail and Electronic Signature**

5 Floating Licences pack

Software Validation Package

Service Provider Option

SAP or ERP Connector Module

With more than 20 years on the market, ISOPLAN Software benefits from all the enhancements that have been asked by our customers during these years becoming this way an efficient, complete and robust software to manage calibrations in the industry.

Presys has a professional structure of engineers and technicians with a good technical background and professional experience in instrumentation, metrology and calibration which ensure an outstanding support, training, startup and regular updates of the software during his life cycle.

PRESYS
www.presys.com.br

Your Distributor:

EF0464-03