

ProCal Direct

by TMA Systems

TMA Systems has just been named as a representative vendor in the **2024 Gartner Market Guide for Enterprise Asset Management Systems**. This recognition is a testament to our commitment to providing quality asset management solutions across a range of asset-intensive industries.

ProCal Direct offers best fit for achieving highest compliance for ISO 17025 compliance.

Life sciences, Chemical Production & Processing, Power, Petrochemical Refining, Gas Production/Custody Transfer, Food & Beverage, Pulp & paper, Semiconductor, Aerospace, Mining, Military, Hospitals/Universities, Metals, Process Manufacturing, Transportation, Municipal Utilities, R&D, Metrology Laboratories, Instrument Service Companies & Others.

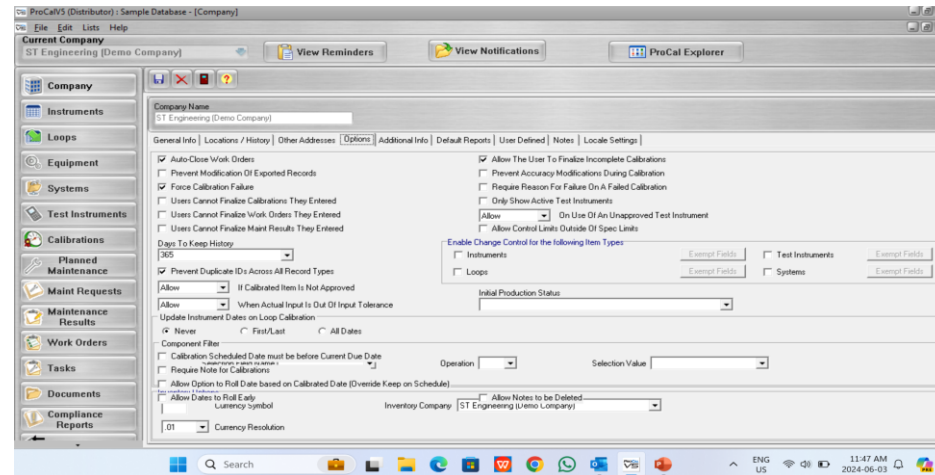
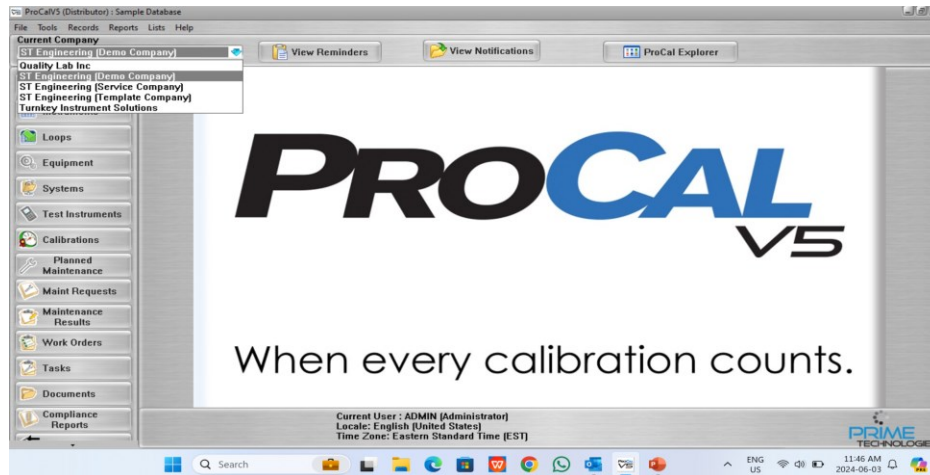
- Full control of Calibration, Maintenance and Asset Management Operations supported with alerts, reminders and warnings.
- Improve Quality controls by automating and tracking every asset, test specification, test calculation, certificate, asset trend, documents, reports and more...
- Efficiently complete quality and regulatory audits and eliminate surprises by tracking and managing compliance events, processes and documentation automatically.
- Eliminate human errors in calculations and work processes through automation
- Drive productivity up by over 100% with easy setup workflows



procalsystems.com

Easy Single/Multi-Site Setup & Configurations

- ProCalV5 (On-premises) / ProCal Direct (Cloud) is a pre-validated GAMP5 system that supports multi-company and multi-site setup.
- ProCal Direct supports compliant record management dictated for cGxP operations per USFDA 21 CFR Part 11, EU GMP Annex 11, ISO 9001-2015, QS 9000, ISO 13485, ISO 17025, ANSI 254 and others.
- Each location/site can setup their own site quality and operations configurations to manage instruments, test instruments, calibrations, maintenance, work orders, quality processes etc.
- Each location/site can have their own user group, user and third-party vendor setup.
- Each location/site will have control rights over their own assets via secure login.
- Each location/site can integrate ProCal Direct to their site's ERP or Plant Management System.



Eliminating Manual Data Entry

Easily import each site's asset data into ProCalV5 Direct...

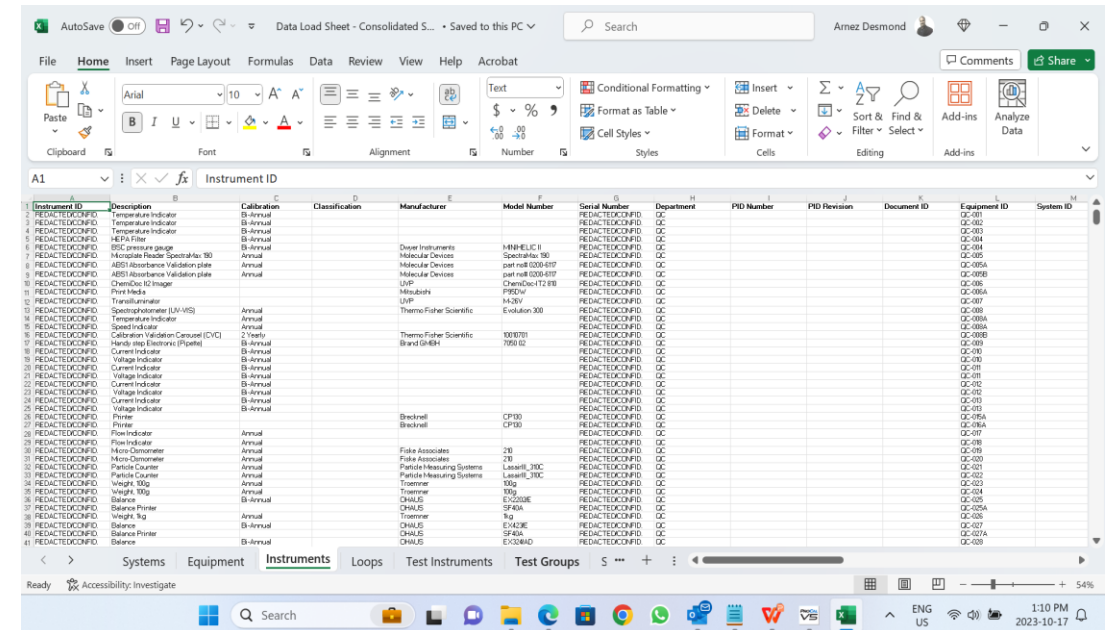
Option 1:

- We use a pre-validated ProCalV5 Data Load Template (DLT) to organize your asset data.
- Easily copy & paste data into the ProCalV5 DLT.
- The ProCalV5 Data Load Utility (DLU) check the ProCalV5 DLT for errors before importing your data into ProCalV5 Direct.

or

Option 2:

- Integrate ProCalV5 / ProCal Direct to your ERP or PMS via the ProCal Data Exchange & Connector to create a seamless IT & CMMS system.



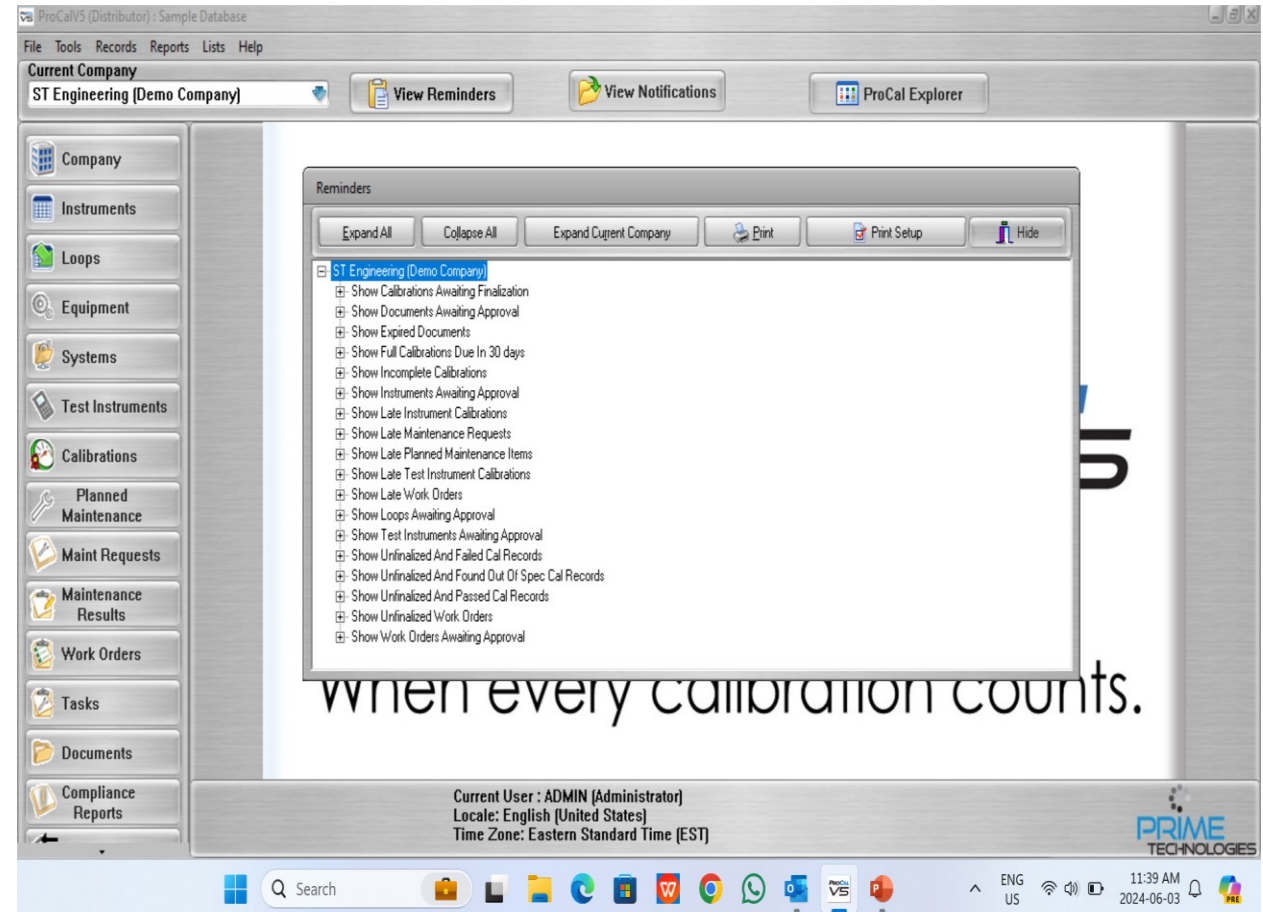
Instrument ID	Description	Calibration	Classification	Manufacturer	Model Number	Serial Number	Department	PID Number	PID Revision	Document ID	Equipment ID	System ID
1	PREDICTEDCONFID	Temperature Indicator	Bi-Annual								QC-001	
2	PREDICTEDCONFID	Temperature Indicator	Bi-Annual								QC-002	
3	PREDICTEDCONFID	Temperature Indicator	Bi-Annual								QC-003	
4	PREDICTEDCONFID	HEPA Filter	Bi-Annual								QC-004	
5	PREDICTEDCONFID	BSC pressure gauge	Bi-Annual								QC-005	
6	PREDICTEDCONFID	Integrate Reader Spectralite 90	Annual	Dover Instruments	MNH-ELC II						QC-006	
7	PREDICTEDCONFID	ABSI Absorbance Validation plate	Annual	Molecular Devices	SpectraMax 160						QC-007	
8	PREDICTEDCONFID	ABSI Absorbance Validation plate	Annual	Molecular Devices	part no# 0206-6107						QC-008	
9	PREDICTEDCONFID	Chemical Storage	Annual	Molecular Devices	part no# 0206-6107						QC-009	
10	PREDICTEDCONFID	Plex Media	Annual	USP	ChemDex 121210						QC-010	
11	PREDICTEDCONFID	Transilluminator	Annual	Minibios	PRD10						QC-011	
12	PREDICTEDCONFID	Spectrophotometer (UV-VIS)	Annual	USP	HS-20V						QC-012	
13	PREDICTEDCONFID	Speed Indicator	Annual	Thermo Fisher Scientific	Evolution 300						QC-013	
14	PREDICTEDCONFID	Calibration Validation Cusum (CVC)	2 Years								QC-014	
15	PREDICTEDCONFID	Handy step Electronics (Pipette)	Bi-Annual	Thermo Fisher Scientific	7050 G2						QC-015	
16	PREDICTEDCONFID	Current Indicator	Bi-Annual								QC-016	
17	PREDICTEDCONFID	Voltage Indicator	Bi-Annual								QC-017	
18	PREDICTEDCONFID	Current Indicator	Bi-Annual								QC-018	
19	PREDICTEDCONFID	Voltage Indicator	Bi-Annual								QC-019	
20	PREDICTEDCONFID	Current Indicator	Bi-Annual								QC-020	
21	PREDICTEDCONFID	Voltage Indicator	Bi-Annual								QC-021	
22	PREDICTEDCONFID	Current Indicator	Bi-Annual								QC-022	
23	PREDICTEDCONFID	Voltage Indicator	Bi-Annual								QC-023	
24	PREDICTEDCONFID	Current Indicator	Bi-Annual								QC-024	
25	PREDICTEDCONFID	Printer	Annual	Brother	CP100						QC-025	
26	PREDICTEDCONFID	Pipe Indicator	Annual	Brother	CP100						QC-026	
27	PREDICTEDCONFID	Pipe Indicator	Annual								QC-027	
28	PREDICTEDCONFID	Micro Dimensioner	Annual	Fiske Associates	210						QC-028	
29	PREDICTEDCONFID	Micro Dimensioner	Annual	Fiske Associates	210						QC-029	
30	PREDICTEDCONFID	Particle Counter	Annual	Particle Measuring Systems	Leasell 300C						QC-030	
31	PREDICTEDCONFID	Particle Counter	Annual	Particle Measuring Systems	Leasell 300C						QC-031	
32	PREDICTEDCONFID	Weight 100g	Annual	Tranmer	100g						QC-032	
33	PREDICTEDCONFID	Weight 100g	Annual	Tranmer	100g						QC-033	
34	PREDICTEDCONFID	Balance	Bi-Annual	CHALLS	EX200R						QC-034	
35	PREDICTEDCONFID	Balance Printer	Annual	CHALLS	SF40A						QC-035	
36	PREDICTEDCONFID	Weight 1g	Annual	Tranmer	1g						QC-036	
37	PREDICTEDCONFID	Balance	Bi-Annual	CHALLS	EX400R						QC-037	
38	PREDICTEDCONFID	Balance Printer	Annual	CHALLS	SF40A						QC-038	
39	PREDICTEDCONFID	Balance	Bi-Annual	CHALLS	EX200R						QC-039	
40	PREDICTEDCONFID	Balance	Bi-Annual	CHALLS	EX200R						QC-040	

Data Load Template

Reminders, Alerts & Warnings

- ProCal Explorer provides a snapshot of all the assets under a company account.
- Get automatic reminders for Assets, Planned Maintenance, Work Orders, Documents.
- Get Alerts & notifications for Failed /Late/Non-Compliance Calibration & Work events.
- ProCal provides Warnings for Pass/Fail status, Non-Approved Assets

& More...



Easy Asset & Workflow Management

ProCalV5 (Distributor) : Sample Database

File Edit Reports Lists Help

Current Company
ST Engineering (Demo Company)

View Reminders View Notifications ProCal Explorer

Company Instruments Loops Equipment Systems Test Instruments Calibrations Planned Maintenance Maint Requests Maintenance Results Work Orders Tasks Documents Compliance Reports

Master Instrument Record

Instrument ID: UNC-DEMO_HL_1D Description: Temperature and Humidity Data Logger (DO NOT DELETE) Last Cal Date: 10-07-2018 Next Cal Date: 10-07-2019

General Info Calibration Points Additional Info User Defined PM Info Notes Documents/Reports Approvals Usage Counts Materials

Test Point Group 1 of 10
Group Name: Test Group (Humidity) Test Type: # Cal Pts: 3

Input Signal
Input Type: % H2O VAPOR In Res: .0001 In Low Range: 0.0000 In High Range: 10.0000 Input Tolerance: +/- 0.0000 Correlation to Output: Linear

Output Signal
Output Type: % H2O VAPOR Out Res: .001 Out Low Range: 0.000 Out High Range: 10.000 Control Limits: Control %: 80.0%

Stated Accuracy: Range Acc %: 5.000000% Reading Acc %: 0.000000% Plus/Minus: 0.000

Input Specifications				Accuracy				Output Specifications				Spec Limits	
In Val	In Type	In +/-	In Res	Std Accy	Rng %	Rdg %	+/-	Out Res	Out Val	Out Type	Low	High	
0.0000	% H2O VA...	0.0000	.0001	Pct of Range	5.000000	0.000000	0.000	.001	0.000	% H2O V...	-0.500	0.500	
5.0000	% H2O VA...	0.0000	.0001	Pct of Range	5.000000	0.000000	0.000	.001	5.000	% H2O V...	4.500	5.500	
10.0000	% H2O VA...	0.0000	.0001	Pct of Range	5.000000	0.000000	0.000	.001	10.000	% H2O V...	9.500	10.500	

Asset Calibration Test Point Group

ProCalV5 (Distributor) : Sample Database

File Edit Reports Lists Help

Current Company
ST Engineering (Demo Company)

View Reminders View Notifications ProCal Explorer

Company Instruments Loops Equipment Systems Test Instruments Calibrations Planned Maintenance Maint Requests Maintenance Results Work Orders Tasks Documents Compliance Reports

Master Instrument Record (Modified)

Instrument ID: UNC-DEMO_HL_1D Description: Temperature and Humidity Data Logger (DO NOT DELETE) Last Cal Date: 10-07-2018 Next Cal Date: 10-07-2019

General Info Calibration Points Additional Info User Defined PM Info Notes Documents/Reports Approvals Usage Counts Materials

Original Approval Policy: Calibration 1 New Approval Policy: Calibration 1 Calibration Approval Policy: Calibration 1

Originator and Reviewer Signatures
Originator: Administrator Changes Complete: Signed By: Title: Date Signed:

Original Approval Signatures
Technician: Approved: Rejected: Signed By: Title: Date Signed:
Supervisor: Approved: Rejected: Signed By: Title: Date Signed:
QA: Approved: Rejected: Signed By: Title: Date Signed:

Approval Policy with eSignature

Schedule
Calibration /
Maintenance



Create
Workflow



Start
Calibration



Use Workflow
Management



Manage &
Quality Control
Calibration



Generate Documents, Certificates,
Labels & Reports



Finalize &
Approve
Documents,
Calibrations,
Maintenance &
Corrective
Action Jobs with
eSignatures

Instrument Master

- General Asset Information
- View Calibration or Maintenance Work History
- Asset 1 or Multiple Test Specifications
- Handles all Types of Calibration Tests including (Temperature, Uncertainty Budget, Electrical, Scales & Balances, Mechanical, Radiation, Bio Cabinet, Dimensional etc.)
- Automatically link Assets to Planned maintenance activities
- Store before/after pictures
- Setup New Asset Calibration Policy
- Store SOPs/Work Instructions with Asset
- Setup Auto-Notifications for As Found/As-Left Failure
- Setup Auto-generate Compliance Report & More...

The screenshot displays the ProCalV5 software interface, titled "ProCalV5 (Distributor) : Sample Database". The interface includes a menu bar (File, Edit, Reports, Lists, Help) and a toolbar with buttons for "View Reminders", "View Notifications", and "ProCal Explorer". A sidebar on the left contains a tree view with categories: Company, Instruments, Loops, Equipment, Systems, Test Instruments, Calibrations, Planned Maintenance, Maint Requests, Maintenance Results, Work Orders, Tasks, Documents, and Compliance Reports.

The main window shows the "Master Instrument Record" for "SEA-PT-001", a "Pressure Transmitter". It includes fields for "Last Cal Date" (11-20-2017) and "Next Cal Date" (10-30-2018). Below this, there are tabs for "General Info", "Calibration Points", "Additional Info", "User Defined", "PM Info", "Notes", "Documents/Reports", "Approvals", and "Materials".

The "Calibration Points" tab is active, showing "Test Point Group 1 of 5". It includes fields for "Group Name", "Test Type", "# Cal Pts", "Input Signal", "Input Type", "In Res", "In Low Range", "In High Range", "Input Tolerance", "Correlation to Output", "Output Signal", "Output Type", "Out Res", "Out Low Range", "Out High Range", "Control Limits", "Use Control Limits", "Control %", "Plus/Minus", "Calculate", and "Restore Defaults".

Below the calibration fields is a table with columns: "Input Specifications", "Accuracy", "Output Specifications", "Spec Limits", and "Des". The table contains three rows of data:

Input Specifications				Accuracy				Output Specifications		Spec Limits		Des	
In Val	In Type	In +/-	In Res	Std Accy	Rng %	Rdg %	+/-	Out Res	Out Val	Out Type	Low	High	Des
10.0000	bar	0.1000	.0001	Pct of Range	0.100000	0.000000	0.000	.001	4.000	mA	3.984	4.016	
105.0000	bar	0.1000	.0001	Pct of Range	0.100000	0.000000	0.000	.001	12.000	mA	11.984	12.016	
200.0000	bar	0.1000	.0001	Pct of Range	0.100000	0.000000	0.000	.001	20.000	mA	19.984	20.016	

The Windows taskbar at the bottom shows the system clock as 10:12 AM on 2024-06-03, along with various application icons and network status.

Performing Calibrations as easy as 1-2-3

Whether Internal team or Third-Party Vendors, end-2-end calibration processes with documentation can be completed within minutes:

- Call the asset to enter the As Found or As Left or Both
- ProCal automatically performs all necessary calculations for pass/fail certifications
- Get e-Signatures according to the calibration approval policy (e.g., Technician, Third Party Vendors, Supervisor, QA, Manager etc.)
- Generates the reports and documents
 - Calibration Certificate
 - Calibration Label
 - Reverse Traceability
 - Instrument Trend Report

& More...

The screenshot displays the ProCalV5 software interface for a 'Sample Database'. The main window shows a calibration record for instrument 'SEA-PT-001'. The 'Calibration ID' is 14, 'Calibrated' on 11-20-2017, 'Scheduled' on 04-30-2018, and 'Cal Frequency' is 6 Months. The 'Test Results' tab is active, showing 'Group 1 of 2 [Cal Group 1]'. The 'Input Signal' is 'bar' with 'In Low Range' 10.0000 and 'In High Range' 200.0000. The 'Output Signal' is 'mA' with 'Out Low Range' 4.000 and 'Out High Range' 20.000. The status is 'Pass'. Below this, a table shows the calibration results for three points (1-1, 1-2, 1-3).

Point	Inputs		Actual Inputs		Output Specifications		Readings		Description
	Nom In Val	In +/-	In Val	In Type	Out Val	Out Type	Find As	Lit As	
1-1	10.0000	0.1000	10.0000	bar	4.000	mA	4	4	
1-2	105.0000	0.1000	105.0000	bar	12.000	mA	12	12	
1-3	200.0000	0.1000	200.0000	bar	20.000	mA	20	20	

Test Type Packages (Calibration Tests)

- ProCal Direct Calibration Test templates support all types of calibration tests.
- ProCal Direct has over 50+ Test Type Packages (TTP - Customized Test Routines) to enhance quality and accuracy of calibration testing. We also offer custom TTP development to meet your unique testing requirements. Here are some of our TTP examples:

Dissolution Suite	Linearity Test	Scales & Balances
HPLC Suite	Manual Pass/Fail	Test Omission
Air Flow & Filter Suite	Pipette Calibration	Timer Test
Bio Containment	Radiation	Uncertainty Budget
Bio Safety Cabinet	Reproducibility	Vibration Probe
Fluke Switch Test	RTD Curve	Temperature
Fume Hood Certification	HEPA Filter Integrity	Pressure Safety Valves
Gas Analyzer Cylinder & Test	Glove Box Certification	Pipette Calibration Z Factor

& More...

Form Entry & Task List

Easily create checklists and forms as part of the maintenance or calibration activities.

Define the mandatory or optional conditions for the activities in forms and checklists that may require or may not user input.

The screenshot shows the ProCal V5 software interface. The 'Calibration (Add)' window is open, displaying a 'Form Data Entry' form. The form has a table with the following structure:

#	Entry	Yes / No	Comment / Selection
1	Did you clean the torque wrench?		

The interface includes a sidebar with navigation options like Company, Instruments, Loops, Equipment, Systems, Test Instruments, Calibrations, Planned Maintenance, Maint Requests, Maintenance Results, Work Orders, Tasks, Documents, and Compliance Reports. The top menu bar includes File, Edit, View, Reports, Multi-Mode, Lists, and Help. The bottom status bar shows the date and time as 10:11 AM on 2024-06-06.

The screenshot shows the ProCal V5 software interface with the 'Task List' window open. The window displays a table with the following structure:

Step #	Step Description	Result	Comment
1	Loosen Screw		
2	Clean		
3	Tighten screw		

A dropdown menu is visible next to the 'Result' column, showing options: Completed, Skipped, and Failed. The interface includes a sidebar with navigation options like Company, Instruments, Loops, Equipment, Systems, Test Instruments, Calibrations, Planned Maintenance, Maint Requests, Maintenance Results, Work Orders, Tasks, Documents, and Compliance Reports. The top menu bar includes File, Edit, View, Reports, Multi-Mode, Lists, and Help. The bottom status bar shows the date and time as 10:12 AM on 2024-06-06.

Compliance Reporting

- Calibration management compliance reporting is very important in the Pharmaceutical, Life Science and Food & Beverage industry.
- ProCal Direct automatically tracks failed/late/non-compliant events and allows quality professionals to take corrective actions.
- Easily generate new compliance reports that include correction of processes, compliance documents, reports, notes, pictures and e-signed approvals.
- Easily pull up compliance reports during quality and compliance audits.

The screenshot displays the ProCalVS (Distributor) : Sample Database application. The main window is titled "Compliance Reports Record (Add)". The interface includes a menu bar (File, Edit, Reports, Lists, Help) and a toolbar with buttons for "View Reminders", "View Notifications", and "ProCal Explorer". A sidebar on the left contains a list of navigation options: Test Instruments, Calibrations, Planned Maintenance, Maint Requests, Maintenance Results, Work Orders, Tasks, Documents, Compliance Reports, Upload/Download, Logged Data, PARTS, Bill Of Material, Requisitions, and Inventory Control. The main form area is divided into several sections:

- General Info:** Includes fields for Report ID, Item Type (Instrument), Instrument ID (SCALE BALANCE), and Report Type. There is a "Choose Item" button.
- Action Taken:** A tabbed section with sub-tabs for General Info, Action Taken, Item Info, User Defined, Notes, and Approvals.
- Event Type:** A dropdown menu showing "Failed Calibration".
- Event Date:** A date field showing "03-06-2022".
- Status:** A dropdown menu showing "Closed".
- Entered By:** A text field.
- Date Entered:** A date field.
- Modified By:** A text field.
- Last Modified:** A date field.
- Finalized By:** A text field.
- Finalized on:** A date field.
- Calibration ID:** A text field showing "0".
- Report Details:** A large text area for additional information.

The bottom of the window shows a Windows taskbar with the Start button, a search bar, and various application icons. The system clock indicates the time is 4:57 PM on 2024-06-03.

Planned Maintenance

- Easily create planned maintenance jobs in ProCal Direct.
- Planned Maintenance jobs are tracked with reminders and alerts.
- Planned Maintenance activities cover maintenance and calibrations tasks.
- For calibration jobs which are part of a planned maintenance, test specifications get automatically included.
- Materials required for jobs (Parts/Materials from Inventory) are also automatically loaded.

& More...

The screenshot displays the ProCalVS (Distributor) : Sample Database application. The interface includes a menu bar (File, Edit, Reports, Lists, Help) and a toolbar with buttons for View Reminders, View Notifications, and ProCal Explorer. A left-hand navigation pane lists various modules: Company, Instruments, Loops, Equipment, Systems, Test Instruments, Calibrations, **Planned Maintenance**, Maint Requests, Maintenance Results, Work Orders, Tasks, Documents, and Compliance Reports. The main window is titled 'Planned Maintenance' and contains the following fields and sections:

- PM ID:** 1
- Item Type:** Instrument
- Instrument ID:** UNC-DEMO_HL_1D (with a 'Choose Item' button)
- Description:** Temperature and Humidity Data Logger (DO NOT DELETE)
- Maintenance Type:** Scheduled (with a 'New' button)
- Description:** Scheduled battery replacement and contact clean
- ☒ Use Default Calibration Specs
- Tabs:** Maintenance (selected), Calibration Specs, User Defined, Notes, Materials
- Responsible Employee:** Mike McClain (with a 'New' button)
- Document ID:** (empty)
- Frequency:** 1 Month
- First Date:** 08-04-2018
- Last Date:** 26-09-2019
- Next Date:** 31-10-2019
- ☒ Keep On Schedule
- ☐ Separate As Found/As Left Readings
- Failure Alert Maintenance Type:** (empty) (with a 'New' button)
- Found Out of Cal Alert Maint Type:** (empty) (with a 'New' button)
- Entered By:** Ken Wachs
- Date Entered:** 09/08/2018 10:58:43 PM
- Modified By:** Ken Wachs
- Last Modified:** 26/09/2019 09:58:08 AM
- Failure Alerts Due:** 0 Days After Event
- Found Out of Cal Alerts Due:** 0 Days After Event
- Exp Man Hrs:** 0.00
- Worksheet Report Override:** (empty)

The Windows taskbar at the bottom shows the system clock as 12:05 PM on 2024-06-03, along with various application icons and system status indicators.

Ad Hoc Maintenance

- Easily create ad-hoc maintenance jobs in ProCal Direct.
- ProCal Direct lists existing Planned Maintenance jobs including due dates which allows managers and supervisors to make more efficient and informed decisions.

& More...

The screenshot displays the ProCalVS (Distributor) : Sample Database application. The interface includes a menu bar (File, Edit, Reports, Lists, Help) and a toolbar with buttons for View Reminders, View Notifications, and ProCal Explorer. A sidebar on the left lists various modules: Company, Instruments, Loops, Equipment, Systems, Test Instruments, Calibrations, Planned Maintenance, Maint Requests, Maintenance Results, Work Orders, Tasks, Documents, and Compliance Reports. The main window is titled 'Maintenance Request (Add)' and contains the following fields and sections:

- MR ID:** A text input field.
- Item Type:** A dropdown menu with 'Instrument' selected.
- Instrument ID:** A text input field with 'TR-01' entered.
- Description:** A text input field with 'Torque Wrench' entered.
- Maintenance Type:** A dropdown menu with 'Scheduled' selected.
- Description:** A text input field.
- General Info / Notes:** A tabbed section with 'General Info' selected.
- Status:** A dropdown menu with 'Active' selected.
- Priority:** A dropdown menu with 'High' selected.
- Select from Existing Calibration Specs for Performing this Requested Cal:** A dropdown menu with 'Full Calibration : Due 30/06/2024' selected.
- Date Required:** A text input field.
- Modified By:** A text input field.
- Last Modified:** A text input field.
- Entered By:** A text input field.
- Date Entered:** A text input field.
- Requester Info:** A section with fields for Requested By (Administrator), Phone, Fax, Email, Address, Date Requested (03-06-2024), and an Acknowledged checkbox.
- Buttons:** New, Current Query: Default.

The Windows taskbar at the bottom shows the system clock as 4:16 PM on 2024-06-03, along with various system icons and application shortcuts.

Work Orders & Tasks

- Work Orders support Planned Maintenance, Ad-hoc Maintenance and Tasks.
- A Work Order can support unlimited tasks.
- Each task can be assigned to an individual, team or third-party vendor.
- Unlimited Tasks can be easily created to support either maintenance or calibration jobs.
- Work Orders can be integrated with ERP and Plant Management System work orders. (Example: Slide 18)

ProCalV5 (Distributor) - Sample Database

File Edit Reports Lists Help

Current Company: ST Engineering (Demo Company)

View Reminders View Notifications ProCal Explorer

Company Instruments Loops Equipment Systems Test Instruments Calibrations Planned Maintenance Maint Requests Maintenance Results Work Orders Tasks Documents Compliance Reports

Work Order (Modified)

Work Order ID: 1 Work Order Number: 1 Description: Work in Site A

General Information Schedule Tasks User Defined Notes

Due Through: 03-07-2024 Within %: 75.0

Work Items Not Currently Assigned To a Work Order

Type	Item Type	Item ID	Maintenance T.	Due Date	% of Target	Responsible T.	Status	Location	B
Planned Maintenance	Instrument	UNC-DEMO_HL_1D	Scheduled	31/10/2019	N/A	Mike McClan	Active	Building A	Buildr
Requested Maintenance	Instrument	SCALE-BALANCE	Maintenance (No Calibration)	04/05/2022	N/A		Active	Building A	Buildr
Requested Maintenance	Instrument	TASK-LIST-SAMPLE	Ad Hoc	16/01/2023	N/A		Active	Building A	Buildr
Requested Maintenance	Instrument	TT-001	Ad Hoc	18/01/2023	N/A		Active	Building A	Buildr
Requested Maintenance	Instrument	TR-01	Calibration	16/01/2023	N/A		Active	Building A	Buildr
Requested Maintenance	Instrument	TR-01	Calibration	N/A			Active	Building A	Buildr

Quick Add a Task

Assign Technician

To All Tasks To Unassigned (Use Responsible)

Reassign Selected Reassign All

Tasks Assigned To This Work Order

Type	Item Type	Item ID	Maintenance T.	Due Date	% of Target	Responsible T.	Status	Location	B
Calibration	Instrument	TR-01	Full Calibration	04/05/2022					
Calibration	Instrument	UNC-DEMO_HL_1D	Full Calibration	04/05/2022					

ProCalV5 (Distributor) - Sample Database

File Edit Reports Lists Help

Current Company: ST Engineering (Demo Company)

View Reminders View Notifications ProCal Explorer

Company Instruments Loops Equipment Systems Test Instruments Calibrations Planned Maintenance Maint Requests Maintenance Results Work Orders Tasks Documents Compliance Reports

Task (Modified)

Task Identification

Task ID: 1 Work Order Number: 1 Item Type: Instrument Instrument ID: TR-01 Choose Item

Maintenance Type: Full Calibration Date Scheduled: 04-05-2022 Status: Active Assigned Technician: Tommy Tech

Results Item Info Notes

Result Data

Start Date: 08-06-2022 End Date: 08-06-2022 Who Performed Work: Tommy Tech Man Hours: 2.50 Failed View Calibration Result

Modified By: Administrator Last Modified: 08/06/2022 08:54:32 AM Entered By: Administrator Date Entered: 04/05/2022 09:17:38 PM

Work Description

1 of 4 Current Query: Default

Parts & Inventory

- Easily create parts and bill of materials in ProCal Direct.
- Parts and materials can be added to assets in ProCal Direct.
- These parts and materials are automatically loaded in Planned Maintenance & Work Order jobs.
- The Inventory module keeps track of the quantity of parts and materials.
- Efficiently generate requisition to better manage inventory for the engineering department.

ProCalV5 (Distributor) - Sample Database

File Edit Reports Lists Help

Current Company: ST Engineering (Demo Company)

View Reminders View Notifications ProCal Explorer

Calibrations Planned Maintenance Maint Requests Maintenance Results Work Orders Tasks Documents Compliance Reports Upload/Download Logged Data PARTS Bill Of Material Requisitions Inventory Control

Parts

Advanced Query Name

Part ID	Part Number	Part Description	On Hand Quantity
1	H-83021085	USB Interface Cable (Type A to B)	5.00

General Info Vendors Part Locations User Defined Notes Substitution Parts

Part Information

Unit of Measure: Piece Part Type: Cable UPC Code: Active Part

Reorder Point: 0.00 Reorder Quantity: 0.00 Manufacturer: Ohaus Manufacturer Part Num: H-83021085

Resale Price: 0.00 Average Cost: 202.00 Default Inven Location: Main Store

Entered By: Administrator Date Entered: 04/05/2022 08:40:59 PM Modified By: Administrator Last Modified: 04/05/2022 08:45:14 PM

1 of 2 Current Query: Default

ProCalV5 (Distributor) - Sample Database - [Part Requisitions (Modified)]

File Edit Reports Lists Help

Current Company: ST Engineering (Demo Company)

View Reminders View Notifications ProCal Explorer

Test Instruments Calibrations Planned Maintenance Maint Requests Maintenance Results Work Orders Tasks Documents Compliance Reports Upload/Download Logged Data PARTS Bill Of Material Requisitions Inventory Control

Part Requisitions (Modified)

Advanced Query Name

Requisition ID: 1 Requisition Description: USB Interface Cable (Type A to B) Status: Active Requestor: Administrator

Entered By: Administrator Date Entered: 03/06/2024 04:42:36 PM Modified By: Administrator Last Modified: 03/06/2024 04:42:36 PM

General Information User Defined Notes

Available Parts

Part ID	Part Number	Part Description	Vendor Name	Reorder Quantity	Unit of Measure	On Hand Quantity	Reorder Point
1	H-83021085	USB Interface Cable (Type A to B)	Instrumentation Technical Services, Inc.	0.00	Piece	5.00	0.00

Create Line(s) Delete Line(s) Show Low Stock Part Number Containing: H-83021085 Search

Requisition Lines

Line Number	Line Description	Part ID	Part Number	Order Quantity	Unit of Measure	Vendor Name	Vendor Part Number	Reorder Multiplier	Re
1	USB Interface Cable (Type A to B)	1	H-83021085	0.00	Piece	Instrumentation Technical Services, Inc.		0	

1 of 1 Current Query: Default

Document Management

- Documents can be attached to Assets in ProCal Direct. These documents can be referenced during maintenance and calibration jobs.
- The Document management module can be used to maintain:
 - SOPs
 - Work Instructions
 - Manuals etc.
- Each document can be quality managed with:
 - Version number
 - Review schedules
 - Document Status / Validity
 - E-Signatures

The screenshot displays the ProCal V5 (Distributor) : Sample Database application. The main window shows the 'Document Records' form for a document titled 'Work Instrument for Temperatures Transmitter'. The form includes fields for Document ID (DOC-101), Revision Number (1), and Document Name. It also features tabs for General Info, Signatures, Procedure, Description, Objective, Scope, Summary, and Notes. The General Info tab is active, showing fields for Document Type (Work Instruction), Effective Date (30-01-2022), Expiration Date (30-01-2024), Date Active (30-01-2022), Date Inactive (30-01-2024), Location (Level 2), Physical Location (Laboratory 1), Building (Building 2), SOP Type (Work Instruction), Linked File (C:\Users\skyn\Downloads\Warranty-Ty...), Review Frequency (Annual), Review Date (30-01-2022), Last Review Date (30-01-2023), and Next Review Date (31-01-2024). The interface includes a sidebar with various modules like Test Instruments, Calibrations, Planned Maintenance, Maint Requests, Maintenance Results, Work Orders, Tasks, Documents, Compliance Reports, Upload/Download, Logged Data, PARTS, Bill Of Material, Requisitions, and Inventory Control. The bottom of the screen shows the Windows taskbar with the search bar and system clock indicating 4:50 PM on 2024-06-03.

Document ID	Revision Number	Document Name
DOC-101	1	Work Instrument for Temperatures Transmitter

Document Type	Effective Date	Expiration Date	Date Active	Date Inactive
Work Instruction	30-01-2022	30-01-2024	30-01-2022	30-01-2024

Location	Physical Location	Building	SOP Type
Level 2	Laboratory 1	Building 2	Work Instruction

Linked File	Review Frequency	Review Date	Last Review Date	Next Review Date
C:\Users\skyn\Downloads\Warranty-Ty...	Annual	30-01-2022	30-01-2023	31-01-2024

Documenting Process Calibrators


Speed up the calibration process with:

- Download tags for calibration jobs and Upload results from DPCs to ProCal Direct
- User-defined test standard settings can allow specific standards to only be used for certain instrument types
- Reverse traceability for tracking affected instruments, if needed
- Links master records to standard operating procedures and other documents
- Automatically send reminders, alerts, and warnings
- Auto-recalculate high/low tolerances during actual field calibrations
- Upload logged data captured in the field
- Pre-structured associations for instruments to loops and/or equipment records are viewable in a hierarchical format which allows for multiple calibration test groups on a single instrument





70+ Reports - View / Print & Export

- Calibration certificates
- Calibration Worksheets
- Completed Planned Maintenance
- A3 Interval Analysis
- Calibration labels
- Instruments Due Reports
- Test Standards Due Reports
- Audit Trail
- Reverse Traceability
- Incomplete / Failed calibrations
- Compliance Reports
- Completed Work Order
- Document Reports
- Calibration Labels
- Completed On-Demand Maintenance
- Custom Reports & more...



Precision Measurements
a division of Instrumentation Technical Services, Inc.

CERTIFICATE of CALIBRATION

Company Name _____

Instrument ID WT93217

<p>Description Weight Set Manufacturer Troemner, LLC Model Number 100g-500g Serial Number z1010234 Calibration Procedure Manufacturer Spec P.O. Number _____ Temp 71°F Humidity 34% RH</p>	<p>Type of Cal In House Received Condition In-Spec Returned In-Spec Adjusted No Calibration Frequency ANNUAL Date Received 08/08/2013 Calibrated 08/08/2013 Due Date 08/08/2014</p>	
--	--	--

Test Point	Group Name	Weight	Ref Standard	Tol	UUT As Found	P/F	UUT As Left	P/F	Dev	Uncertainty
1	100.0 grams	+/-0.0010	100.0009 grams	P	100.0009 grams	P	0.0009		0.0441 mg	
2	200.0 grams	+/-0.001	200.000 grams	P	200.000 grams	P	0.000		0.132 mg	
3	300.0 grams	+/-0.001	300.001 grams	P	300.001 grams	P	0.001		0.139 mg	
4	400.0 grams	+/-0.001	400.001 grams	P	400.001 grams	P	0.001		0.187 mg	
5	500.0 grams	+/-0.0	500.0 grams	P	500.0 grams	P	0.0		0.4 mg	

Test Instrument ID	Manufacturer	Model Number	Traceability No.	Next Cal Date
PMI 499	Sartorius AG	CCE1004		5/21/2014
PMI 500	Sartorius AG	CCE106		5/21/2014
PMI 727	Troemner, LLC	7223-1	697665-1	12/19/2013

This instrument has been calibrated in accordance with the Precision Measurements Quality Assurance Manual and is traceable to the International Systems of Units (SI) through National Metrological Institutes, radiometric techniques or natural physical constants. (NIST). Precision Measurements quality system is registered to ISO 9001:2008 and accredited to ISO/IEC 17025:2005. Precision Measurements is also compliant to ANSI/NCSL Z540-1:1994, ISO 10012-1, 10 CFR, 50 App. B, 10 CFR 21, and MIL-STD-45662A. This report may not be reproduced, except in full, without the written approval of Precision Measurements. Unless stated otherwise, the expanded measurement uncertainty of the measurement process does not exceed 25% of the tolerance allowed for the individual characteristics measured, the measurement uncertainties for this calibration are based upon 95% (2 sigma) confidence limits.

Remarks or Special Requirements: _____

Print Date: 08/27/2013

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Precision Measurements
A Division of Instrumentation Technical Service, Inc.
20 Hagerty Boulevard, Suite 1 * West Chester, PA 19382 * (610) 436-9703 * (610) 436-9097 Fax

TEST INSTRUMENT REVERSE TRACEABILITY REPORT

For the Period: 1/1/2017 - 10/5/2017

Test Instrument Owner * Demo	Model Number Class A
Test Instrument ID T-005	Serial Number N/A
Description Weight set	Last Cal Date 1/1/2017
Status Active	Next Cal Date 1/1/2018

INSTRUMENTS CALIBRATED

Company Name * Demo					
Item ID	Description	Manufacturer	Model Number	Serial Number	Calibrated
111	Temp & Humidity Transmitter	Vaisala	R25 Temp-45	65464	10/5/2017
10001	New Gauge	Aishcroft	12345	YY876	8/14/2017
10001	New Gauge	Aishcroft	12345	YY876	8/15/2017
10002	New Gauge	Aishcroft	1234	YTB43	8/2/2017
10002	100 PSI Pressure Gauge	Aishcroft	1234	65465489	8/2/2017
10002	100 PSI Pressure Gauge	Aishcroft	1234	65465489	8/2/2017
10002	100 PSI Pressure Gauge	Aishcroft	1234	65465489	8/17/2017
Number of Instrument Calibrations for This Company Using This Test Instrument: 7					

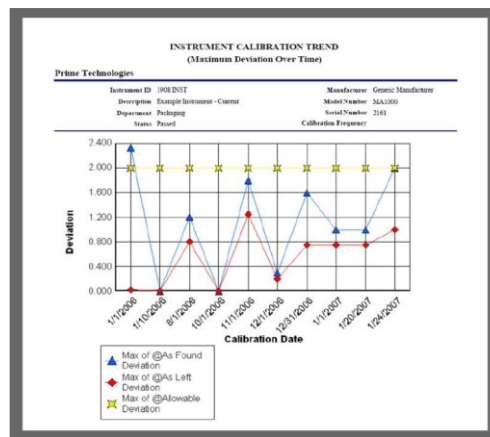
LOOPS CALIBRATED

Company Name		
Item ID	Description	Calibrated
Number of Loop Calibrations for This Company Using This Test Instrument:		

TEST INSTRUMENTS CALIBRATED

Company Name					
Test Instrument ID	Description	Manufacturer	Model Number	Serial Number	Calibrated
Number of Test Instrument Calibrations for This Company Using This Test Instrument:					

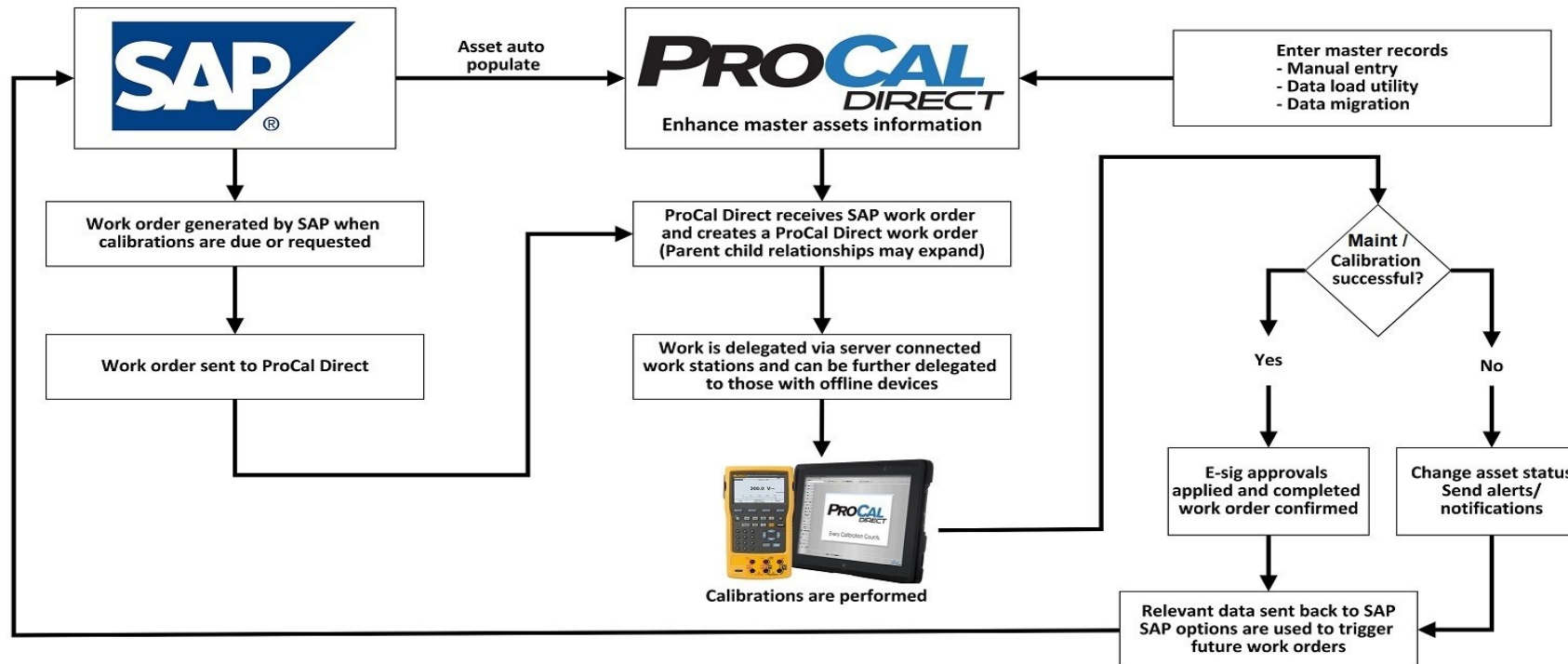
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SAP / ERP Integration (Sample Workflow)

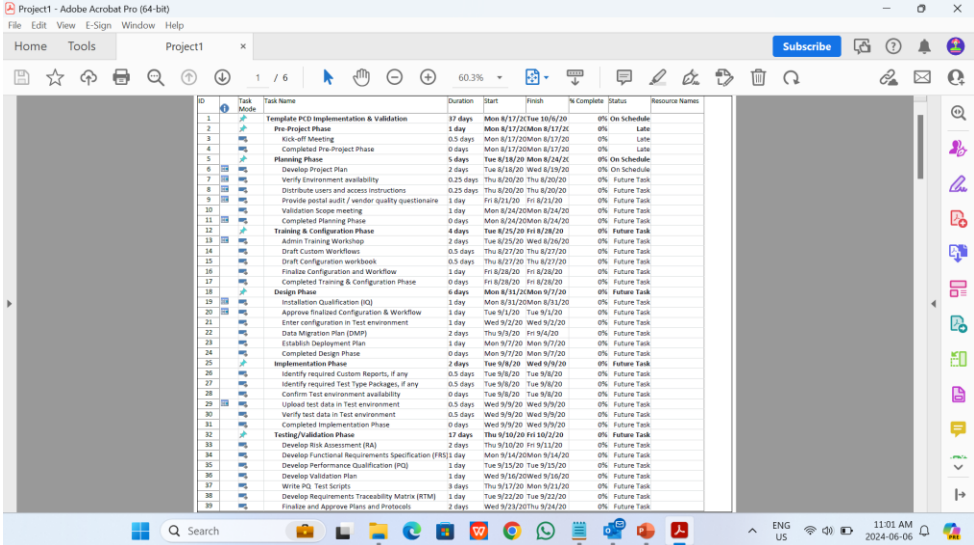
- Clients can choose to use ProCal Direct as a standalone system or integrated with their ERP or PMS systems.
- Clients may also choose to use only the calibration functionality and still integrate with ERP or PMS systems.

SAP & Calibration Work Flow



Validation Services

- ProCal Direct is a pre-validated GAMP 5 Software. We can provide supporting Mail-In-Audit documentation.
- For On-Site Validation Requirements: We can support clients with validation scripts and consulting services.
- ProCal Direct consulting services are professionally executed under strict project management guidelines.
- ProCal Direct validation services can be completed in under 40 days. These are phases in our consulting support for IQ / PQ:
 - Pre-Project Phase
 - Planning Phase
 - Training & Configuration Phase
 - Design Phase
 - Implementation Phase
 - Testing / Validation Phase
 - Deployment Phase



The screenshot shows a Gantt chart software interface with a project named 'Project1'. The interface includes a menu bar (File, Edit, View, E-Sign, Window, Help), a toolbar with various icons, and a main workspace displaying a Gantt chart. The Gantt chart lists tasks with their durations, start and finish dates, and completion status. The tasks are organized into phases: Pre-Project Phase, Planning Phase, Training & Configuration Phase, Design Phase, Implementation Phase, Testing/Validation Phase, and Deployment Phase. The status of each task is indicated by a progress bar and a percentage completion value.

ID	Task	Task Name	Duration	Start	Finish	% Complete	Status	Resource Names
1	Task	Template PCD Implementation & Validation	17 days	Mon 8/17/20	Tue 8/18/20	0%	On Schedule	
2	Task	Pre-Project Phase	1 day	Mon 8/17/20	Mon 8/17/20	0%	Late	
3	Task	Kick-off Meeting	0.5 days	Mon 8/17/20	Mon 8/17/20	0%	Late	
4	Task	Completed Pre-Project Phase	0 days	Mon 8/17/20	Mon 8/17/20	0%	Late	
5	Task	Planning Phase	5 days	Tue 8/18/20	Mon 8/24/20	0%	On Schedule	
6	Task	Develop Project Plan	2 days	Tue 8/18/20	Wed 8/19/20	0%	On Schedule	
7	Task	Verify Environment availability	0.25 days	Thu 8/20/20	Thu 8/20/20	0%	Future Task	
8	Task	Distribute user and access instructions	0.25 days	Thu 8/20/20	Thu 8/20/20	0%	Future Task	
9	Task	Provide portal audit / vendor quality questionnaire	1 day	Fri 8/21/20	Fri 8/21/20	0%	Future Task	
10	Task	Validation Scope meeting	1 day	Mon 8/24/20	Mon 8/24/20	0%	Future Task	
11	Task	Completed Planning Phase	0 days	Mon 8/24/20	Mon 8/24/20	0%	Future Task	
12	Task	Training & Configuration Phase	4 days	Tue 8/24/20	Fri 8/28/20	0%	Future Task	
13	Task	Admin Training Workshop	2 days	Tue 8/24/20	Wed 8/26/20	0%	Future Task	
14	Task	Draft Custom Workflows	0.5 days	Thu 8/27/20	Thu 8/27/20	0%	Future Task	
15	Task	Draft Configuration workbook	0.5 days	Thu 8/27/20	Thu 8/27/20	0%	Future Task	
16	Task	Finalize Configuration and Workflow	1 day	Fri 8/28/20	Fri 8/28/20	0%	Future Task	
17	Task	Completed Training & Configuration Phase	0 days	Fri 8/28/20	Fri 8/28/20	0%	Future Task	
18	Task	Design Phase	4 days	Mon 8/31/20	Mon 9/7/20	0%	Future Task	
19	Task	Installation Qualification (IQ)	1 day	Mon 8/31/20	Mon 8/31/20	0%	Future Task	
20	Task	Approve Finalized Configuration & Workflow	1 day	Tue 9/1/20	Tue 9/1/20	0%	Future Task	
21	Task	Enter configuration in Test environment	1 day	Wed 9/2/20	Wed 9/2/20	0%	Future Task	
22	Task	Data Migration Plan (DMP)	2 days	Thu 9/3/20	Fri 9/4/20	0%	Future Task	
23	Task	Establish Deployment Plan	1 day	Mon 9/7/20	Mon 9/7/20	0%	Future Task	
24	Task	Completed Design Phase	0 days	Mon 9/7/20	Mon 9/7/20	0%	Future Task	
25	Task	Implementation Phase	2 days	Tue 9/8/20	Wed 9/9/20	0%	Future Task	
26	Task	Identify required Custom Reports, if any	0.5 days	Tue 9/8/20	Tue 9/8/20	0%	Future Task	
27	Task	Identify required Test Type Packages, if any	0.5 days	Tue 9/8/20	Tue 9/8/20	0%	Future Task	
28	Task	Confirm Test environment availability	0 days	Tue 9/8/20	Tue 9/8/20	0%	Future Task	
29	Task	Upload test data in Test environment	0.5 days	Wed 9/9/20	Wed 9/9/20	0%	Future Task	
30	Task	Verify test data in Test environment	0.5 days	Wed 9/9/20	Wed 9/9/20	0%	Future Task	
31	Task	Completed Implementation Phase	0 days	Wed 9/9/20	Wed 9/9/20	0%	Future Task	
32	Task	Testing/Validation Phase	17 days	Thu 9/10/20	Fri 9/18/20	0%	Future Task	
33	Task	Develop Risk Assessment (RA)	2 days	Thu 9/10/20	Fri 9/11/20	0%	Future Task	
34	Task	Develop Functional Requirements Specification (FRS)	1 day	Mon 9/14/20	Mon 9/14/20	0%	Future Task	
35	Task	Develop Performance Qualification (PQ)	1 day	Tue 9/15/20	Tue 9/15/20	0%	Future Task	
36	Task	Develop Validation Plan	1 day	Wed 9/16/20	Wed 9/16/20	0%	Future Task	
37	Task	Write PQ Test Scripts	3 days	Thu 9/17/20	Mon 9/21/20	0%	Future Task	
38	Task	Develop Requirements Traceability Matrix (RTM)	1 day	Wed 9/23/20	Thu 9/24/20	0%	Future Task	
39	Task	Finalize and Approve Plans and Protocols	2 days	Wed 9/23/20	Thu 9/24/20	0%	Future Task	

Clients Currently Using ProCalV5

