

ABB MEASUREMENT & ANALYTICS | RELEASE NOTES

# **Plunger Analysis System (PAS)** Version 2.3.4.0 1/10/2018



# 1 Purpose

These release notes detail new features and modifications, functional changes, and bug fixes made to the Plunger Analysis System (PAS) software (part number 2106006-001).

# 2 Notice

PAS 2.3.2.9 and previous versions must be uninstalled before installing version 2.3.3.10 or later. License files need to be reissued and activated again.

For additional information on installation and activation see the Plunger Analysis System Administration Guide (2105844MNAA).

## **3** Product overview

PAS is an analysis tool created to optimize the use of the Plunger System application available in ABB Totalflow XSeries devices (8-bit and 32-bit units). PAS analyzes plunger lift cycles using the data generated through five main variables: Casing, Tubing, Line, Flow rate, and Arrival Time. PAS uses trend files and calculates set points based on averages and other statistical data that is helpful for the successful operation of a plunger system. PAS then assists the user in understanding not only how the plunger is operating, but gives recommendation on how to improve its performance.

# 4 Release features

Features or enhancements for each version can be reviewed in this section.

## 4.1 Version 2.3.4.0

The following enhancements are included:

- Two options are provided for the selection of the Foss and Gaul calculations:
  - Calculations implemented by PAS 2.0
  - Calculations implemented in the legacy PAS 1.0 product
- The Tubing-Line pressure recommendation is dependent on the number of cycles contained in the sample:
  - Data average when samples contain few cycles
  - Optimal cycle data when samples contain several cycles
- The Coleman Turner flow algorithm has been modified to identify cycles with normal arrivals:
  - If the normal arrival number is equal or greater than 7, then the system does average of normal cycles only
  - If normal cycles are less than 7, the system averages the Turner flow for all the cycles

## 4.2 Version alpha 2.3.3.10

No enhancements or new features are included in this version.

## 4.3 Version alpha 2.3.2.9

No enhancements or new features are included in this version.

## 4.4 Version alpha 2.3.2.8

No enhancements or new features are included in this version.

## 4.5 Version alpha 2.2.1.7

No enhancements or new features are included in this version.

## 4.6 Version 2.1.1.6

The following enhancements are included:

- Support for multi user licensing

## 4.7 Version 2.0.1.5

The following enhancements are included:

- Support for switching between online and offline license tracking
- Support for the user to view license status

## 4.8 Version Alpha 2.0.1.3

No enhancements or new features are included in this version.

## 4.9 Version Alpha 2.0.0.2

The following enhancements are included:

- Support for Single user licensing package
- Support for activating the license offline and online
- Support for tracking the number of usages offline and online for optimization and fault detection.

# 5 Known issues and workarounds

Known issues and workarounds for PAS are described in the following sections.

# 5.1 PAS updates from alpha versions require license reissue

License files used for PAS 2.3.2.9 and earlier (alpha versions) do not automatically apply to PAS 2.3.3.10 or later. To reissue licenses:

- 1. Uninstall PAS 2.3.2.9 or earlier (alpha versions) before installing version 2.3.3.10 or later.
- 2. Re-issue and activate license files.
- 3. For multi user installation usage tracking should be changed to online tracking through the PAS license user interface.

## 5.2 Login denial

The improper logout of a session, denies any further login, even though the session is eligible for access based on the concurrent user license policy.

Perform one of the following to restore access:

- 1. In single-user scenarios restart IIS.
- 2. In multi-user scenarios, with administrative login:
  - a) Select Administrator> User Management> Current Sessions.
  - b) Close the sessions that are not applicable.
- 3. Wait for 20 minutes for the session to expire and retry login.

## 5.3 Insufficient IIS features enabled on Windows Server 2012 R2

Enabling IIS during PAS installation may not enable all the required features for PAS to work properly.

To ensure all required features are enabled:

- 1. On your system's task bar, select Start and Control Panel.
- 2. Select Program and Features.
- 3. On the navigation pane, select Turn Windows Features on or off (Fig. 1).

		Programs and Features			
🔄 🔄 👻 🕇 🔯 🕨 Control	Panel + Programs + Programs and Features				~ C
Control Panel Home View installed updates	Uninstall or change a program To uninstall a program, select it from the list and then	click Uninstall, Change, or Repair.			
<u> </u>	Organize  Uninstall Name	Publisher	Installed On	Size	Version
	ABBPlungerAnalysis	ABB TotalFlow	11/2/2017		2.3.3.10
	📙 Microsoft SQL Server 2008 Setup Support Files	Microsoft Corporation	11/2/2017	28.2 MB	10.1.2731.0
	Microsoft SQL Server 2012	Microsoft Corporation	11/2/2017		
	Microsoft SQL Server 2012 Native Client	Microsoft Corporation	11/2/2017	7.22 MB	11.0.2100.60
	📑 Microsoft SQL Server 2012 Setup (English)	Microsoft Corporation	11/2/2017	39.0 MB	11.0.2100.60
	🚦 Microsoft SQL Server 2012 Transact-SQL ScriptDom	Microsoft Corporation	11/2/2017	4.53 MB	11.0.2100.60
	E Microsoft Visual C++ 2010 x64 Redistributable - 10.0	Microsoft Corporation	11/2/2017	13.8 MB	10.0.40219
	Microsoft Visual C++ 2010 x86 Redistributable - 10.0	Microsoft Corporation	11/2/2017	11.1 MB	10.0.40219
	🖟 Microsoft Visual C++ 2012 Redistributable (x86) - 11.0	Microsoft Corporation	11/2/2017	17.3 MB	11.0.50727.1
	Microsoft VSS Writer for SQL Server 2012	Microsoft Corporation	11/2/2017	2.91 MB	11.0.2100.60
	SQL Server Browser for SQL Server 2012	Microsoft Corporation	11/2/2017	9.88 MB	11.0.2100.60

Fig. 1: Programs and features

4. When the Add Roles and Feature Wizard window displays read the information provided before you begin (Fig. 2) and then click **Next**.



Fig. 2: Add Roles and Features Wizard

5. On the Select installation type window (Fig. 3), select **Role-based or feature-based instal**lation and click **Next**.

<b>b</b>	Add Roles and Features Wizard
Select installation	type Destination server
Before You Begin Installation Type	Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).
Server Selection	Role-based or feature-based installation Configure a single server by adding roles, role services, and features.
Features Confirmation Results	Remote Desktop Services installation Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.
	< Previous Next > Install Cancel

Fig. 3: Select installation type

6. On the Select Destination server window (Fig. 4), choose **Select a server from the server pool** and click **Next.** 

	Add R	oles and Features	Wizard	>
Select destinati	on server			DESTINATION SERVER PASTESTVM
Before You Begin	Select a server or a virtual hard disk on which to install roles and features.			
Installation Type	• Select a server from the server pool			
Server Selection	O Select a virtual has	rd disk		
Server Roles	Server Pool		$\sim$	
Features				
Confirmation	Filter:			
Results	Name	IP Address	Operating System	
	PASTESTVM	10.0.0.4	Microsoft Windows Server 20	12 R2 Datacenter
	1 Computer(s) found			
		d in Server Manager. O	ndows Server 2012, and that have ffline servers and newly-added se	
		< Pr	revious Next >	Install Cancel

Fig. 4: Select destination server

7. On the Select server roles window ensure that the **File and Storage Services** and **Web Server (IIS)** roles are selected (Fig. 5).

<b>B</b>	Add Roles and Features Wizard	_ <b>D</b> X
Select server roles		DESTINATION SERVER PASTESTVM
Before You Begin	Select one or more roles to install on the selected server.	
Installation Type	Roles	Description
Server Selection Server Roles Features Confirmation Results	<ul> <li>Active Directory Federation Services</li> <li>Active Directory Lightweight Directory Services</li> <li>Active Directory Rights Management Services</li> <li>Application Server</li> <li>DHCP Server</li> <li>DNS Server</li> <li>Fax Server</li> <li>File and Storage Services (1 of 12 installed)</li> <li>Hyper-V</li> </ul>	Active Directory Certificate Services (AD CS) is used to create certification authorities and related role services that allow you to issue and manage certificates used in a variety of applications.
	<ul> <li>Network Policy and Access Services</li> <li>Print and Document Services</li> <li>Remote Access</li> <li>Remote Desktop Services</li> <li>Volume Activation Services</li> <li>▶ ■ Web Server (IIS) (17 of 43 installed)</li> <li>✓ </li> </ul>	xt > Install Cancel

Fig. 5: Select server roles

- 8. On the Select features window (Fig. 6), locate WCF Services.
- 9. Expand WCF Services and check all the boxes associated with the feature (Fig. 6).

B	Add Roles and Features Wizard	
Before You Begin Installation Type Server Selection	Select one or more features to install on the selected server. Features	DESTINATION SERVER PASTESTVM Description Windows Communication
Server Roles Features Confirmation Results	<ul> <li>Inter Framework 3.5 Features (1 of 3 installed)</li> <li>Inter Framework 4.5 Features (Installed)</li> <li>Inter Framework 4.5 (Installed)</li> <li>ASP.NET 4.5 (Installed)</li> <li>ASP.NET 4.5 (Installed)</li> <li>ASP.NET 4.5 (Installed)</li> <li>Metry Aspectation (Installed)</li> <li>Metry Aspectation (Installed)</li> <li>Metry Activation (Installed)</li> <li>Metry Activation (Installed)</li> <li>TCP Activation (Installed)</li> <li>TCP Activation (Installed)</li> <li>TCP Activation (Installed)</li> <li>TCP Port Sharing (Installed)</li> <li>BitLocker Drive Encryption (Installed)</li> <li>BitLocker Network Unlock</li> <li>BranchCache</li> <li>Metry Aspectation</li> <li>Metry Aspectation</li> </ul>	Foundation (WCF) Activation uses Windows Process Activation Service to invoke applications remotely over the network by using protocols such as HTTP, Message Queuing, TCP, and named pipes. Consequently, applications can start and stop dynamically in response to incoming work items, resulting in application hosting that is more robust, manageable, and efficient.
	< Previous Next :	> Install Cancel

#### Fig. 6: Select features

10. Click Next to continue until the installation is complete.

## 5.4 Activation error

During offline activation an error occurs if the wrong extension file is provided.

To retry activation:

- 1. Close the license user interface.
- 2. Open again to upload the correct file.

## 5.5 Bug fixes

Bug or defect fixes for each version are described in this section.

## 5.6 Version 2.3.4.0

Bugs fixed in version 2.3.4.0 are described in the following sections.

#### 5.6.1 Cyber security related issues

Cyber Security issues have been fixed and approved by the ABB Device Security Assurance Center (DSAC).

#### 5.6.2 Other

- Scaling issue with fault detection has been corrected

## 5.7 Version 2.3.4.0

The following bugs have been fixed:

- 9676 Logs are not created for Fault detection errors.
- 9517 PAS uses local system as the AppPool account instead of running as an IIS work group thread process
- 9516 Outdated SQL Server 2012 version installed with PAS. It should be 11.0.6567.0 or higher.
- 9515 API service unknown state and functions. API service 5985/TCP open.

## 5.8 Version alpha 2.3.3.10

The following bugs have been fixed:

- Default configuration of database should be mentioned as not created

## 5.9 Version alpha 2.3.2.9

The following bugs have been fixed:

- 9494 Logs are not created for Fault detection errors.
- 9496 Misleading error message on uploading a csv file without cycles.
- 9498 PAS not throwing a specific error if the Trigger header names are not correct.

## 5.10 Version alpha 2.3.2.8

The following bugs have been fixed:

- 9470 License validation creating issues, when the user connects/disconnects Ethernet cable.
- Modified the binding with Mac address to Disk Serial number.

## 5.11 Version alpha 2.2.1.7

The following bugs have been fixed:

- 9459 License Request file extension not correct.
- 9338 Well Name cannot start with a numeric number.
- 9240 Error message, when well name is not available is not clear.
- 9476 Batch mode enabled through command line execution without Batch license.

## 5.12 Version 2.1.1.6

The following bugs have been fixed:

- 9337 PAS throw error as "User Already logged in", though the user is not logged in.
- 9413 Users not able to login, except default admin user.

## 5.13 Version 2.0.1.5

The following bugs have been fixed:

- 9234 PAS versioning is not correct.
- 9221 Plunger cycle configurability not available in user interface.
- 9216 Minimum and maximum arrival timings interchanged.

## 5.14 Version Alpha 2.0.1.3

The following bugs have been fixed:

- In offline mode, usage tracking checks for internet connection and denying access to Optimization and Fault detection.

## 5.15 Version Alpha 2.0.0.2

The following bugs have been fixed:

 9344 – Default settings of this version is not in synchronization with the old 1.0 version of Plunger Analysis software.



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