

APPLICATION NOTE

ExperALERT™ integration with OMNITREND Center™

Introduction

This document describes the integration steps to transfer online device data from VIBGUARD, via OMNITREND Center™ (OMTC) to the ExpertALERT™ (EA) automated diagnostic software and Expert Automated Diagnostic System™ (EADS) for automated analysis and reporting.

The OMNITREND configuration tool is used for data transfer. There, preconfigured OMTC databases must be connected to EA together with position and orientation specifications of test point sensors.

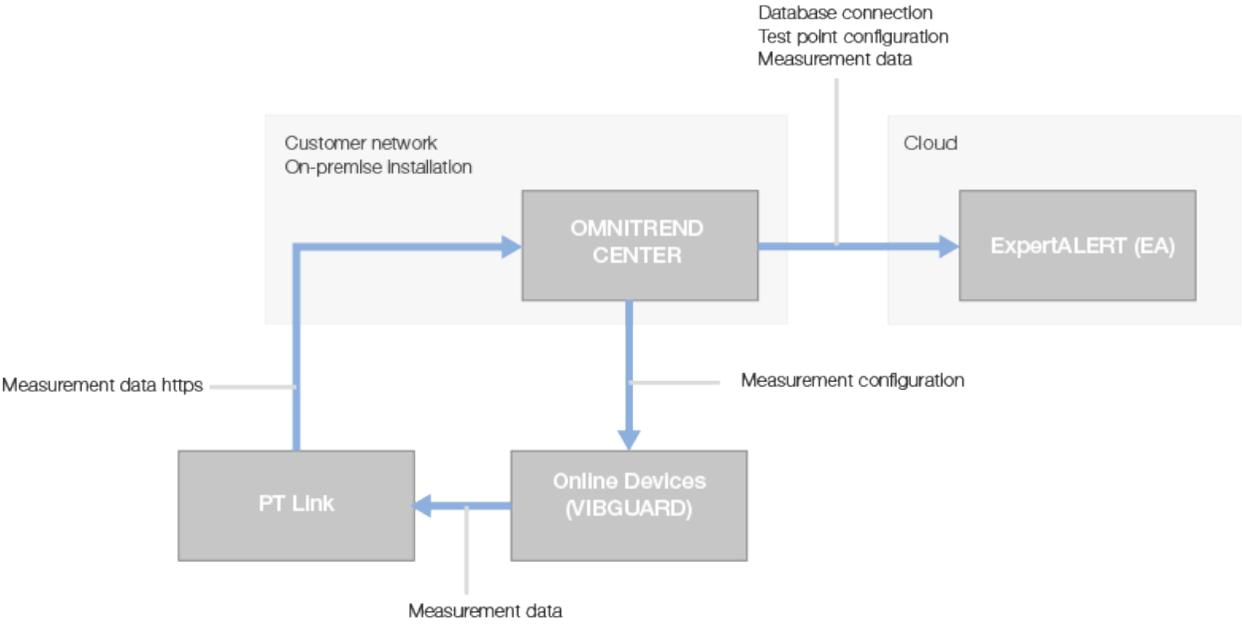
ExpertALERT is an automated diagnostic application that is operated by the Fluke Reliability vibration analyst team, Watchman Services. The Watchman Service team will service and maintain the OMTC application to ensure continued compatibility with ExpertALERT. Watchman Service will configure the asset hierarchy, diagnostic templates, and AI engine in the ExpertALERT application.

Upon completion of this integration, assets that have been enabled for integration with EA will automatically transmit new measurement data every 15 minutes, after first validating all expected datasets have been collected for the asset. Once data arrives in EA, EADS will automatically process the data and generate a diagnostic result. Results can be reviewed in the EA software for further analysis and delivery through the Watchman Portal to all decision makers.

Prerequisites

- Prior to integration evaluate compatibility of OMTC for automated diagnostics. Ensure that all IT requirements are met. Please read the document "IT requirements for EA integration with OMTC".
- Install PT Link for communication with VIBGUARD.
- Install the newest firmware version (KW03/2023) for all VIBGUARD devices (also those not assigned to EA).

Overview system components and data flow



Integration steps

1. Install OMTC version (2.8.1)

Ensure that OMTC is already configured with:

- Kinematic model

Note: User defined machines and complex gearboxes are not supported. Test points on belt drive are not supported. Belt drive as component is supported.

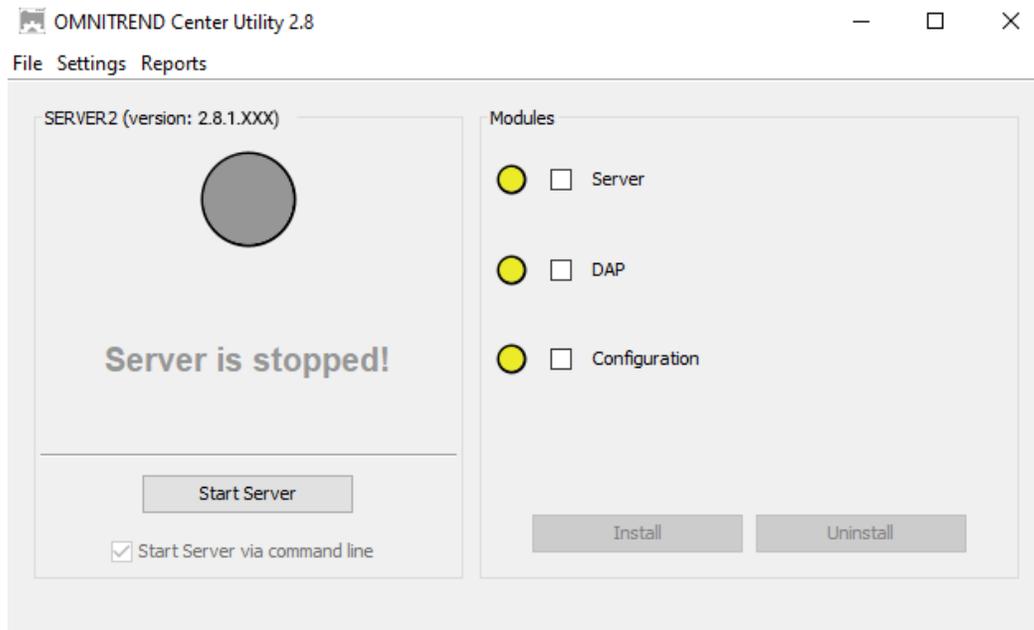
- Test points, including specified sensors that are connected to channels in channel groups on the online device

Note: When the asset is already monitored with EA, avoid unlinking already configured assets or reassignment of the channels

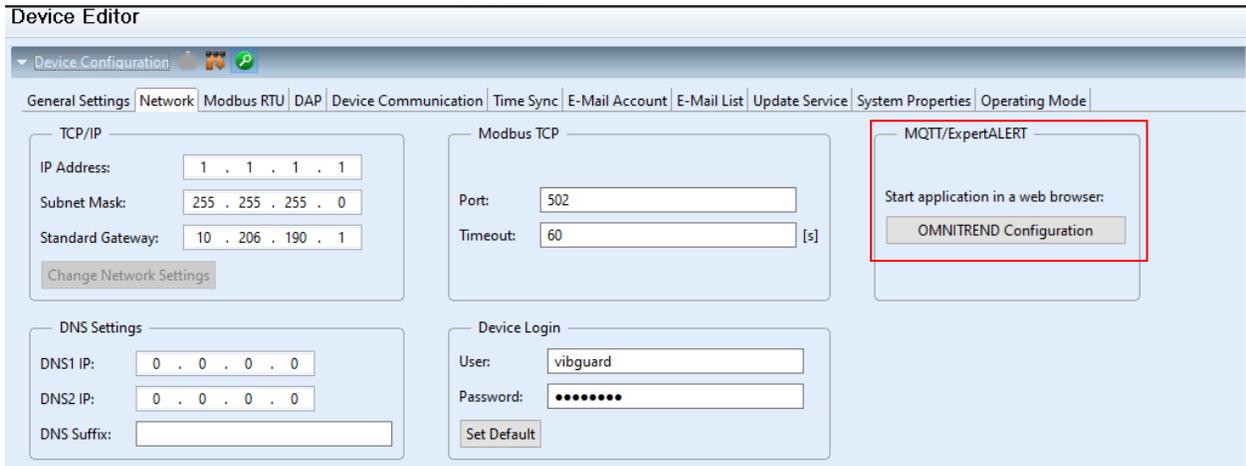
- Correct machine running, or nominal, speed

2. Deploy OMNITREND configuration and start service in Utility Center

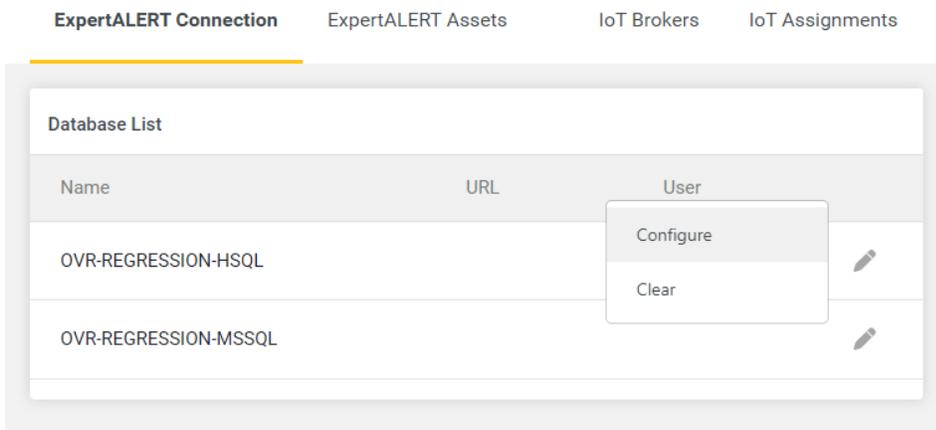
- Open Utility Center
- Stop server in Utility Center
- Check Configuration check box
- Click Install
- Restart the server



- ### 3. In the Device Editor of OMTC, select the Network tab and click “OMNITREND Configuration” to open the application in your web browser.



- Set up ExpertALERT connection in OMNITREND Configuration. In OMNITREND Configuration, click the ExpertALERT Connection tab. Here you can see all OMTC databases that are available for your account.



To connect a database to EA, click  , then click Configure

Enter URL , Username and Password, then click Save.

Note: URL, Username and Password will be provided by the ExpertALERT database administrator.

Configuration

Database: OVR-REGRESSION **2** Active ExpertALERT Assets

<input type="checkbox"/>	All Assets	^
<input type="checkbox"/>	Project	^
<input checked="" type="checkbox"/>	vgdc asset	
<input checked="" type="checkbox"/>	vgd asset	
<input type="checkbox"/>	vgd asset save not changes	

Once an asset is configured and selected click “Send Configuration to ExpertALERT”.

Note: An asset that is not configured is labelled with

Click for each asset to configure its test points for integration.

For each test point of every asset the position and orientation of the sensors have to be selected and linked to the EA tool.

Project/vgdc asset		3000 RPM	
Component	Test point	Position	Orientation
Motor	A1	DE	Horizontal
Motor	A2	DE	Vertical

Click Save to save the current data entry or click Save & Send to save the current data entry and send the data to ExpertALERT.

Click “Monitor with ExpertALERT”.

Triggers creation of diagnostic groups in OMTC for all asset test points with assigned channels and sensors.

ExpertALERT specific tasks are prepared automatically in the diagnostic group.

In the Diagnostic group in OMTC confirm that the checkbox “Use in Measurement Configuration” is ticked.

Diagnostic

General | Alarm Criterion | Adaptive Storage | Save permanently | Interval | Measurement Trigger

Name:

Type: Diagnostic

Use in Measurement Configuration:

Update configuration on online device.

Adapt interval (default 24 hours) in diagnostic group of OMTC if required.

Upload measurement configuration to VIBGUARD.

Note: Install the newest firmware version (KW03/2023) for VIBGUARD.



Configuration changes

Changes to OMTC during integration should be in coordination with Watchman Services personnel.