amber boon

# Amber + PI System

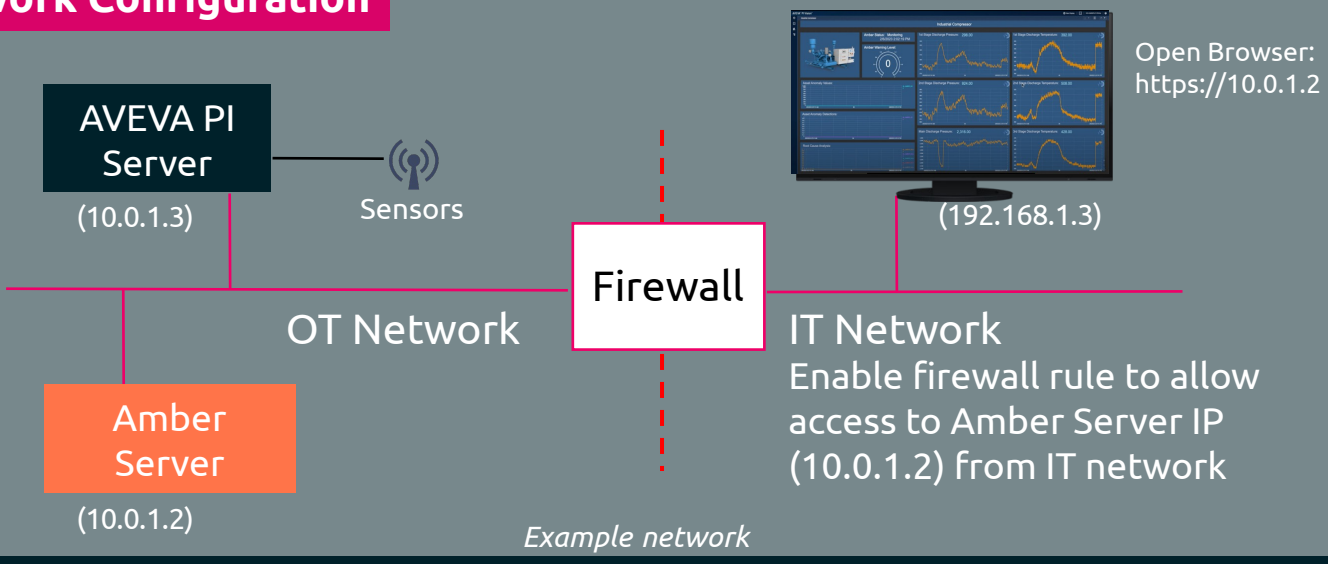
Connect Amber with AVEVA PI System for complete visibility into operational health

The data collected in your PI System could be telling you so much more. Most equipment sensor data doesn't have any analytics in place, and those that do often produce false alerts, which erode user confidence. Being truly data-driven in an operations and maintenance program is now within reach. PI System customers can use Amber to deploy AI models in seconds for any type of equipment and receive warnings they can trust right in PI Vision.

## Technical Requirements

- Existing AVEVA PI server
- PI Web API enabled
- Ethernet connection on same network as PI server (OT network)
- Username and password credentials for PI server
- Known IP address and domain name of AVEVA PI server

## Network Configuration




*Example network*

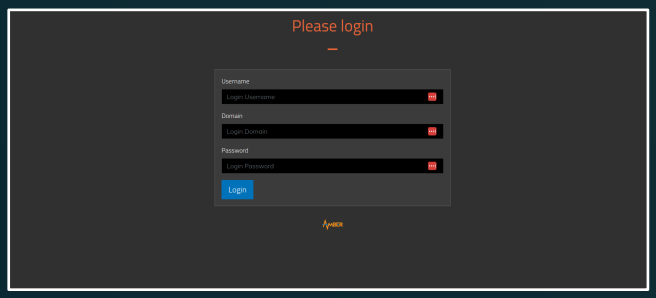
## Connecting Amber to PI

1 Boon Logic will ship you an Amber on-prem server that you will connect via ethernet into the same network that runs the OSIsoft PI Server. Ask your IT team to determine the IP address of the Amber server, as that will be used in future steps. Call Boon Logic to help remote configure the Amber server.

2 The Amber server will talk to the OSIsoft PI Server via the PI Web API. Once the server is installed and configured, use any computer on the same network as the PI Server and open a web browser. Type in the IP address (https://your Amber IP address). This will bring you to the configuration web page, where you can start creating your first model.

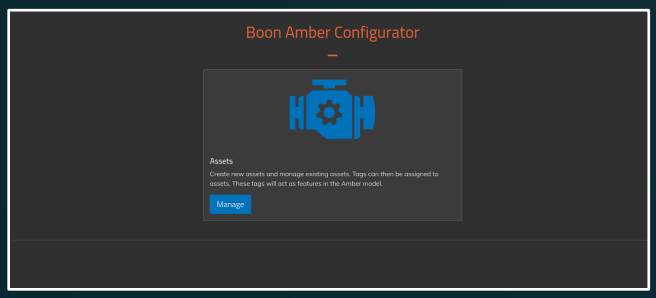
## Login to Amber Configurator

Login using valid credentials for the OSI PI server. The username and password will be your own. The domain is the domain name of the windows server that hosts the PI server. Click “Login”.



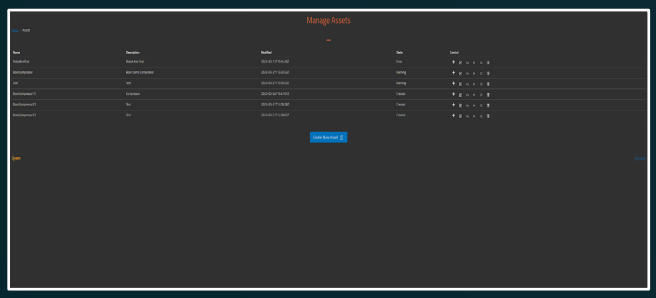

## Enter Amber Configurator

The Boon Amber Configurator landing page will pop up. Click “Manage”.



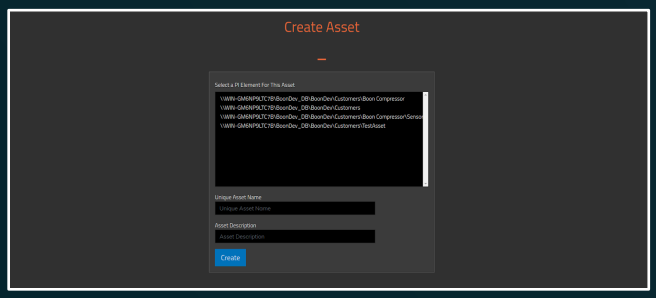

## View Summary of All Assets

A summary of the currently configured assets will be displayed. All existing assets will be listed, but initially this list will be empty. To create a new asset, click “Create New Asset”.




## Create a New Asset

This page will allow you to start creating a new asset. Select a root PI element from the list of current PI elements. Then create a unique asset name to describe this asset (no spaces). Finally, provide a brief asset description.

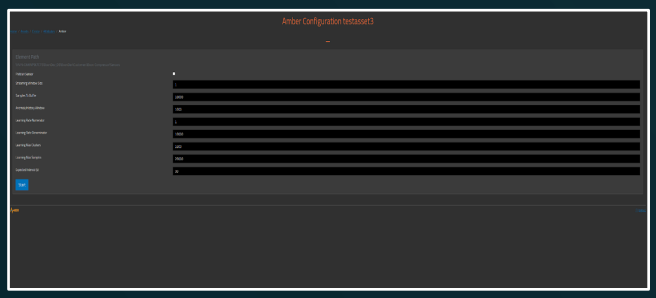


## Assign Attributes to a Model

On this page you will choose sensors / attributes from the left side. Pressing “Select” assigns those attributes to the machine learning model for this asset. You may select between 1 and 500 attributes. Choose attributes that you think best relate to the health of the equipment you wish to monitor. Then select “Next”.

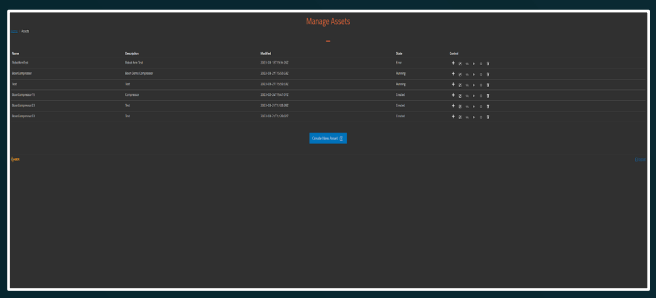

## Pretrain using Historical Data

Amber configuration: Click “Pretrain Sensor” and select a time range to pretrain on. When complete, click “Start”. This will bring you back to the Manage Assets page.




## Manage Assets

Back on the Manage Assets page, you can control each asset with the icons on the right. “Expand” shows all the attributes for a particular asset. “Edit” allows you to change settings. “Learning” will re-enable learning for that asset. “Start” restarts a paused asset. “Stop” pauses an asset analytics. “Delete” will permanently remove the asset.



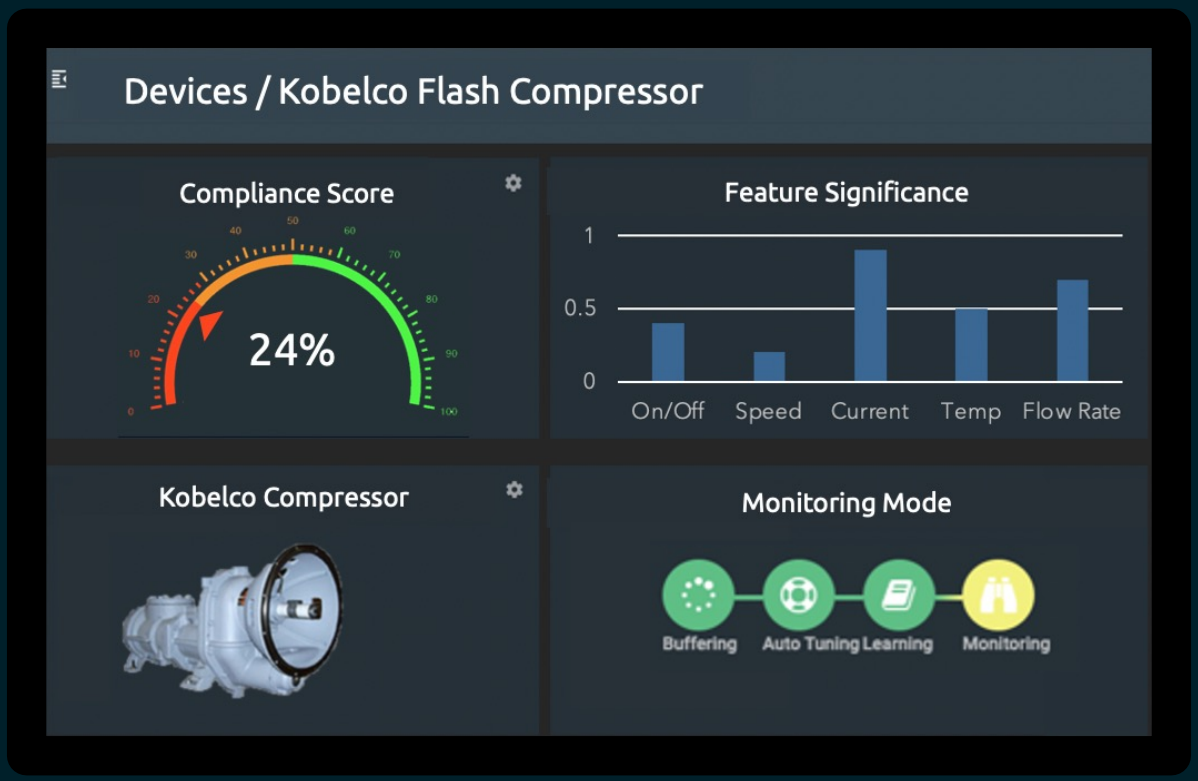
# Actionable Analytics

Users receive real-time insight into the health of their asset and the tags that indicate a changing condition. Warnings can be preset to send alarms to specific users when an asset is changing or critical.

Compliance Score (CS) shows the health of the asset on a scale from 0–100%

**NORMAL** 100% – 51%
**CHANGING** 50% – 26%
**CRITICAL** 0% – 25%

Feature Significance highlights the top tags that contribute to causing an alarm to occur. Often this is from an abnormal never-before-seen relationship of two or more parameters.



# Discover anomaly detection like you've never seen before

Explore the demo and sign up for a trial today.


*Amber integrated into PI Vision*

Ask a Question

Watch a Demo

boon

boonlogic.com