# ARDI Minimal Data-Linking Setup

Optrix Pty. Ltd.

## ABSTRACT

This guide covers the sequence required to set up the most basic data connection between ARDI and a data source.

# Overview

## What Does This Document Cover?

This document gives the absolute minimum amount of work required to create an ARDI database that links to live data.

It is offered as an exercise and method of testing. You should NOT base your actual ARDI database on this example, as it skips some important steps.

## Assumed Knowledge

This document assumes you already know how to access and login to your ARDI instance with an administrative account.

# The Scenario

We are going to set up a very basic system. A single temperature sensor, linked to a data source so it has live information.

This guide assumes you are starting from a completely empty ARDI database, so it will contain a number of steps that aren't normally required.

# Create Drivers and Properties

First, you'll need to set up your drivers and properties so that we can create your temperature sensor.

### *Create Your Driver*

To do this, we go to 'Administration' in the sidebar, then choose 'Drivers'.

Pick your driver from the list, stick with the default name and press 'Add Driver'.

### *Create a Temperature Property*

In 'Administration', choose 'Properties'.

Hit 'Add Property'

Name the property 'Temperature', change the type to 'Measurement'.

Fill in the details on the right – give it measurement units (Deg C), minimum (0), maximum (100) and decimal places (1).

Save the property.

# Create Base Assets

Now we create your assets. We start with those that represent your data source.

### *Create your Data Source Asset*

Choose 'Browse' and 'Location' from your sidebar.

Press the 'Plus' button to the right of your base asset to create a new one.

Name it after your *data source* (ie. PI Web Services server)

Don't set any other properties and hit 'Create'.

### *Set it up as a Data Source*

Click on 'Details'.

From the navigation menu on the right-hand-side, choose 'Data Source(s)'

For Actual Live data, click on 'Create'

From ‘Driver’, pick the driver you enabled earlier.

On the right-hand-side, choose the connection details for your data source. *For example, if this is a PI Web Services data source, you would choose the URL for your PI server. If this was a Modbus TCP data source, you’d choose the IP address of the MODBUS device.*

Hit ‘Save’ to mark the asset as a data source.

### *Create your Temperature Sensor*

Choose ‘Browse’ and ‘Location’ from the sidebar.

Press the ‘Plus’ button to the right of your base asset to create a new one.

Name it ‘Temperature Sensor’

Don’t set any other properties and hit ‘Create’

### *Assign a Temperature*

Choose ‘Details’ from the Sidebar

Hit ‘Show All’ in the properties list

Find the temperature sensor and click on ‘Not Set’.

Fill in the values, setting the ‘measurement’ to zero (or anything you like).

Hit ‘Save’

### *Link the Temperature to Live Data*

Hit F5 (this is a workaround for a bug and will not be required in later versions)

Click on the downward-facing arrow *next* to the temperature.

Choose ‘Link…’.

Select the drop down under ‘measurement’ and pick the name of your data source (configured in the ‘Create Your Data Source Asset’ step.

Enter the details for the link, then hit ‘Save Link’. *For example, if this was a PI Web Services data source you’d enter the tag number. If this was a MODBUS TCP data source, you’d enter the register address.*

## Check the Results

Click on the name of your asset in the top-right corner of the screen to return to the details of the asset.

Now choose ‘Dashboard’ from the sidebar to see the live data. You can also click on the box containing the data to get a live recording.