# infinitii advanced calculation engine

infinitii advanced calculation engine processes real-time data through Python and R scripts for discovery of patterns or prediction of events in large data-sets. It's a data science application that supports model development and code-based experimentation. ML Ops teams can use it to operationalize and deploy production-ready models.

Easily deploy existing Machine Learning algorithms and calculations including functions from Python libraries data analysts use every day. It's as simple as cutting and pasting your Python code into an intuitive interface, and then minutes or even seconds later see the code create new data.

## **Deploy Python and R scripts in real time**

Output your model in real time by transferring your code to our application, then apply it to streaming data. New calculated values can then be used for alarming and notification or shared through an API to third party applications.

#### Pull data from any source

Pull data from any source that generates the required information, process that data through a customized Python or R script, then map the output to a target data channel.

### **Templates and bundles**

Templates and bundles are two key concepts when deploying models with infinitii advanced calculation engine. Together, templates and bundles allow you to create your own custom programmatic solutions using Python or R to produce advanced data transformations.

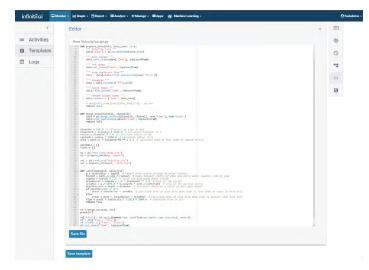
A template can be deployed in multiple bundles or, a single script can be re-used to transform many data channels which saves time and reduces chance of errors. It also allows you to update a data transformation happening in multiple channels by simply changing the template.

## Templates define how data is handled

Templates define how your data will be handled by infinitii advanced calculation engine. Templates are where you keep your code scripted in Python or R, and where you define other details, like input channels, target channels, parameters and scheduling that are shared across bundles. They contain the actionable code with placeholders for parameters and variables that may vary from one data source to the next.

## **Bundles are instances of a template**

You can use templates repeatedly for different data sources by creating bundles. Bundles are instances of a template configured for use with a specific data source.



Copy and paste modeling scripts to run against incoming data

When a bundle is created, the template placeholders are replaced with specific input, target channels and parameters. You can create any number of bundles from the same template.

#### Scripts process your data

The core of any infinitii advanced calculation engine template is the Python or R script you use to process your data. Using a script to create data transformations or new calculated channels of information means you can perform complex calculations all at once instead of needing intermediary channels to manage the data.

## Easily integrate third-party applications and online data

Furthermore, infinitii advanced calculation engine's scripting functionality is fully capable of integrating third-party applications, and can use data from those sources or online data sources when calculating the output to target data channels.

This means that almost any time series data source can be used by infinitii advanced calculation engine directly, which greatly simplifies workflows involving multiple data sources.

