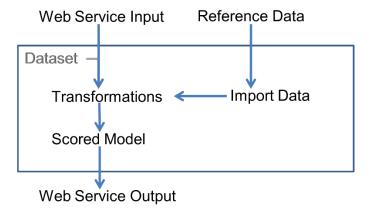


## **Data Science Essentials**

Data Ingestion and Flow

An Azure ML experiment is usually published as a Web service, to which real-time data can be passed as input and results are returned as output. In addition to the real-time data passed to the web service, the experiment may reference static data. This is illustrated in the following image:

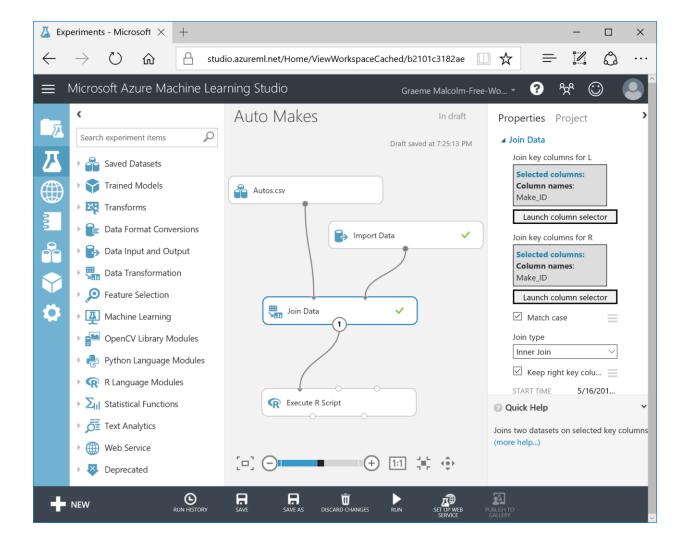


You can use the following Azure ML modules to read data:

- Dataset (read data from sample data or manually uploaded data files)
- Import Data: (read data from external sources such as Azure storage, Azure SQL Database, HTTP URLs, data feeds, Hive tables in Hadoop)

You can use the Join Data module to combine two datasets based on common key fields.

The following experiment ingests source data from a dataset, uses an **Import Data** module to import reference data from a relational database, and uses a **Join Data** module to match rows in the two data sources.



For more information, see the following documentation:

- Import Data: <a href="https://azure.microsoft.com/en-us/documentation/articles/machine-learning-import-data/">https://azure.microsoft.com/en-us/documentation/articles/machine-learning-import-data/</a>
- Data Input and Output: <a href="https://msdn.microsoft.com/en-us/library/azure/dn906024.aspx">https://msdn.microsoft.com/en-us/library/azure/dn906024.aspx</a>
- Join Data: https://msdn.microsoft.com/en-us/library/azure/dn905836.aspx