# TaskFlow.NET Overview

TaskFlow.NET is a simple assistant bot for the .NET framework that can be trained to perform jobs made up of one or more tasks. The framework is approximately broken into the following areas:

**Utilities**

A utility has a single purpose and acts like a service with one or more parameters and generates an output. Utilities can also have configurable settings to tailor its behaviour.

**Jobs**

A job is a collection of tasks that run in a set order. The outputs of each task are piped into the following task and the final output is returned.

**Commands**

A command performs a single action and can have zero or more parameters, including optional and choice-based parameters.

**Scheduling**

The scheduler can be set to run tasks at specified times and dates. Schedulable items include commands, utilities, jobs, conversations and synchronisations. Scheduled tasks can be repeated at set intervals indefinitely or a set number of times.

**Learning**

Artificial neural network and natural language processing (NLP) techniques are used to provide basic AI features including conversations using natural language and customising jobs/tasks based on knowledge of the user and the current context.

**Conversations**

The idea of conversations is to provide a non-technical (natural language) interface to a bot. A conversation is between a single user and the bot. A message can either be a query that returns information or can trigger an action that performs one or more tasks (such as run a job).

**Logging**

All events including errors, jobs, utilities, commands, conversations, I/O, scheduling and learning are logged separately to keep an audit trail of what happens.

**Cloud**

Synchronisation of data and communication between TaskFlow.NET clients/servers.