KUPA
Artificial Intelligence

KTSL
Transformation
starts here

Implementing KUPA
for your Helix Environment

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The KUPA Range

KUPA's AI Analytics has the power to transform by unlocking the truth behind your data to drive business improvement – quickly, easily, and cost–effectively. The KUPA product family performs the analysis on the data and makes it available through reporting, API and Teams.

What implementation is covered?

In this paper, we cover implementing KUPA AI, KUPA Search and KUPA Share. This is based on the ITSM platform of Helix and an integration into Teams. The reporting will be provided by the Power BI platform. The high-level components are as follows:

- KUPA Artificial Intelligence
- KUPA Search
- KUPA Share for Microsoft Teams
- Power BI Reporting Suite
- Helix Integration (as the data provider)

KUPA AI Analytics

The platform is based on python. Anaconda is installed and the python libraries used by AI engine. The platform provides an API layer to allow the KTSL GUI to access and update the model. The GUI platform is based on .NET core and provides an authentication layer to access the platform. The GUI itself is in HTML 5. The install is performed on a Windows Server, dual core, 16gb RAM.

The GUI is split into the following modules and runs on IIS:
- Model Management – For creation of the AI model, processing of the data and supervised learning. Also contains the audit history
- Service Management – Management of the AI output, the CI and Purpose modelling and the linking to Knowledge Articles/Solutions and Automation
- User Management – Creation of access accounts to the solution, secured within the database held on the server.

KUPA Search

Front end HTML 5 web application to allow end users to access the AI analysis. By keying in a sentence, you can see the return of CI, Purpose and Knowledge Article's solutions setup within the AI Analytical engine. Based on the User Management and security permissions of the end user. Installed on IIS.

## KUPA Share for Microsoft Teams

KUPA Share exposes the API for additional channels such as Teams, Yammer and Slack. For Teams, a Microsoft Teams BOT is deployed within the standard Microsoft framework. This accesses the same API above using the same access mechanisms. The BOT needs to be deployed to the customer Teams environment.

Power BI Reports

The output can be viewed Power BI out of the box. We provide the Power BI reports which are configured against the data source. The Power BI permissions model via AD is deployed.

The product ships with the following reports:

- Drift Reports – Human vs AI categorisation
- Top x CIs and Top x Purposes
- Purpose Graphs – Language used by CI
- CI and Purpose Clusters
- Heatmaps – CI by Purpose Volume Graphs
- Word Template for Output
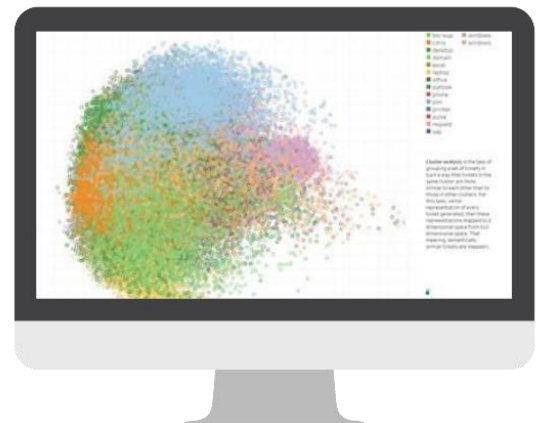
Helix Integration

The data is loaded into the AI engine initially via an Atrium Integrator job which bulk loads the data in. A daily job is then configured during off peak hours to move the daily data into the model for processing. This again uses an Atrium Integrator job. The job uses the standard BMC processing mechanism. The files do need to be accessible to the AI Analytics engine installed server from the BMC Helix Cloud. This can vary based on the network connectivity to Helix.

Infrastructure

The diagram below shows the high-level architecture diagram for a typical deployment. It shows how the components fit together and the communication layer.