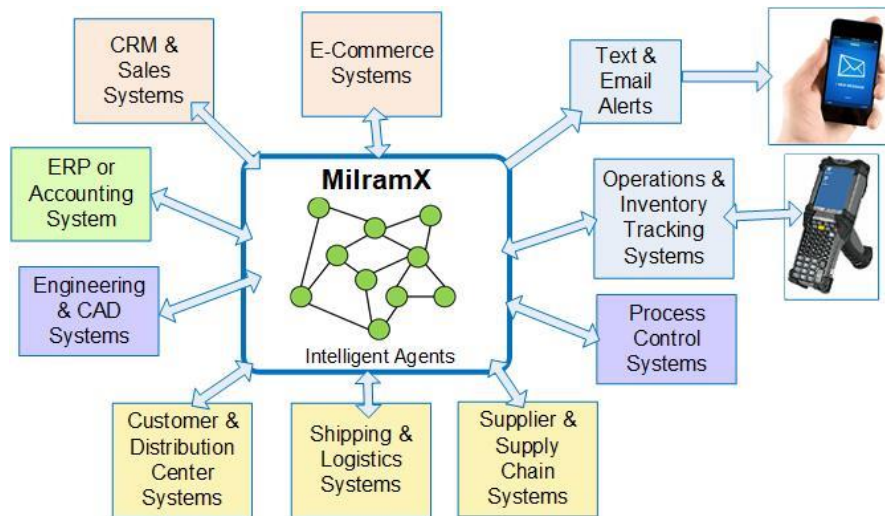## KnarrTek Artificial Intelligence Technology

Both BellHawk and KnarrOps make extensive use of the MilramX real-time intelligent agent software platform for exchanging data with other systems, as well as generating text and Email message alerts. With MilramX, the intelligent agents are coded as Data Transfer Objects (DTOs) in Python, where ease of modification is required or .Net where high performance is required. MilramX includes a mechanism for scheduling and dynamically prioritizing the order in which DTOs are executed. MilramX is able to make use of processors capable of executing many processor threads in parallel thus enabling the execution of the DTOs in parallel.
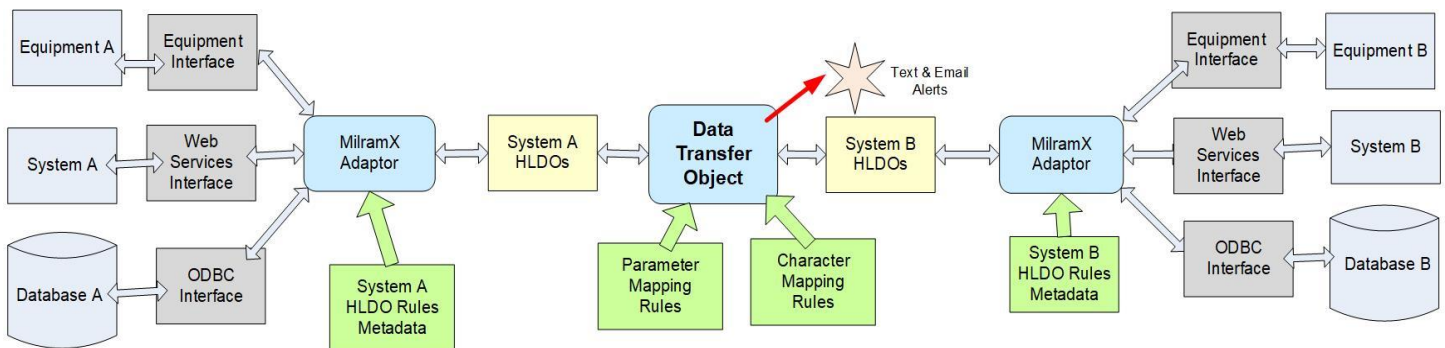
Both BellHawk and KnarrOps are based on the Tau-Adaptor expert system, which translate between the complexities of database, web-services, and equipment interfaces and High-Level Data Objects (HLDO), expressed as JSON strings. This is to make it easy for programmer analysts to develop DTOs, reports, and AI algorithms, in languages such as Python, without needing to know the details of these interfaces.

Both BellHawk and KnarrOps include expert systems rules, which enable these systems to be configured for a wide range of applications without code modification. These rules, like other rules in both systems are configured by importing the parameters of these rules in the form of Excel spreadsheets.

BellHawk makes extensive use of a specialized expert system called Magic Forms to make it easy for materials handlers and other production workers who are not computer literate to collect data and be warned when they are about to make an operational mistake.

This includes the ability for clients to define what data and in what format custom data is to be collected by the transactions in BellHawk.

BellHawk also uses an expert system embedded within the TAG software to print situation-specific custom barcode labels without operator intervention, thus avoiding mistakes.

As well as being used for transferring data between systems and sending Alert messages, MilramX sets of DTOs can use a full range of AI techniques, such as Neural Networks, Model-Based Reasoning, Clustering and Simulation to interpret data from multiple sources

MilramX is also used as the basis of the BellHawk MDEX store-and-forward interface as well as the Remote Desktop Interface (RDI).
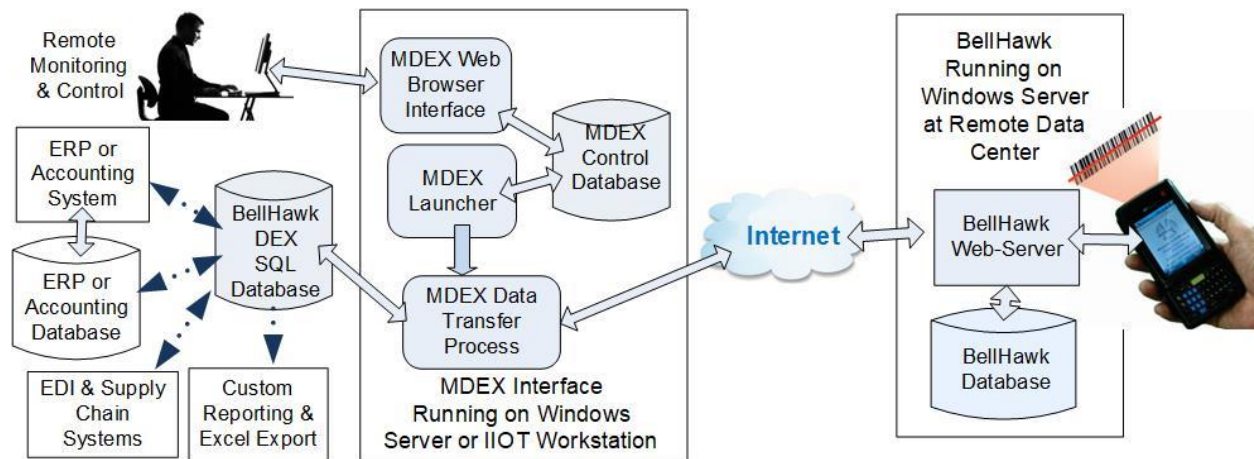
This interface provides an easy mechanism for external systems to exchange data with BellHawk by simply writing data into, and reading data from, the DEX SQL Server interface.

For More Information

Please contact Sales@KnarrTek.com or see www.KnarrTek.com for more details.