

AI Agents

The AI purpose-built agents enable answers in real-time and faster decisions, reducing dramatically the time and specialist skills required to find insights, build dashboards and reports.

Overview

Critical Manufacturing MES provides a common framework for generative AI. Each AI capability is handled by a purpose-built AI Agent, with its own instructions and access to the tools it needs. These tools are exposed through MCP (Model Context Protocol) Servers, which connect the AI Agents to MES data and services. Users work with AI Agents in two ways:

- **Conversational AI** – from the main navigation menu, users select an available AI Agent and start a conversation with it.
- **Embedded AI** – AI is built into the areas of the MES where users work, through actions such as Ask AI, Compare and View Summary on entities, documents and attachments, and through dedicated experiences to generate UI Pages, dashboards and Shift Handover Summaries.

Standard Generative AI deployment includes the system AI Agents describe in figure 1.

Each capability is mapped to the AI Agent that handles it. Administrators can also create their own AI Agents for specific scenarios, with their own instructions, model and MCP Servers. MCP Servers can be system-provided or external. A capability can then be mapped to a custom AI Agent. AI Agents and MCP Servers are managed in AI Administration and synchronized with the AI runtime.

Using AI requires the AI Infrastructure to be deployed and a large language model (LLM) to be configured in the system.

AI Agent	Capability	Purpose
CM MES Agent	General Assistance	Ask general questions about MES entities, documents and attachments, or about how the product works.
CM Entity Agent	Entity Knowledge	Ask questions about the current entity, document or attachment, summarize a document or attachment, or compare versions of an entity or document.
CM UI Page Builder Agent	UI Page Building	Create or refine a UI Page from a natural-language description.
CM Shift Handover Agent	Shift Handover Reporting	Generate a Shift Handover Summary from a Shift Logbook.
CM Analytics Agent	Data Exploration	Ask questions about manufacturing data, such as production figures, yield, KPIs and trends, without writing queries or reports.
CM Dashboard Builder Agent	Dashboard Building	Create or refine dashboards from a natural-language description.

Figure 1 Gen-AI Purpose Built Agents

