Dynatrace OneAgent: Overview and Capabilities

OneAgent is the core monitoring component of the Dynatrace platform. It is a **lightweight binary file** that includes a suite of **pre-configured services** developed by Dynatrace to enable **full-stack observability**.

🔧 **Key Functionalities**

Once deployed, OneAgent automatically detects and monitors:

- **Infrastructure**: Collects detailed metrics at the **data center**, **host**, and **hardware** levels.

- **Operating Systems**: Monitors OS-level metrics such as memory, CPU, disk I/O, and more.

- **Application Processes**: Provides deep observability into processes running on the host.

🔍 **Code-Level Injection**

OneAgent has powerful capabilities to **instrument code** across multiple programming environments:

- **Java**

- **Node.js**

- **.NET**

- **Python**

By injecting itself directly into these application runtimes, it enables monitoring **from inside the application**, capturing detailed traces, exceptions, method calls, and performance bottlenecks.

🌐 **Front-End Monitoring**

OneAgent also supports **Real User Monitoring (RUM)**:

- Injects a **JavaScript tag** into HTML pages served by your web application.

- Tracks **user interactions** and performance across **desktop and mobile** browsers.

- Monitors **page load times**, **click events**, and **navigation patterns**, providing a **complete view of the user experience**.

🧠 **Full Stack Coverage**

From the **physical host** in a data center to the **end-user's browser**, OneAgent offers **complete visibility** across all layers of a modern system:

- Data Center

- Host (Server or VM)

- Application Processes

- Code Execution

- User Interface

✅ **Benefits of Using OneAgent**

- **Seamless Deployment**: Easy to install on any host or cluster.

- **Automatic Discovery**: Automatically detects services and dependencies without manual configuration.

- **Comprehensive Observability**: Captures logs, metrics, traces, and user behavior.

- **Unified Monitoring**: Works in hybrid, multi-cloud, and containerized environments.

Dynatrace OneAgent empowers teams with **deep insights** and **real-time observability**, helping detect issues proactively and enhancing the overall performance and security of applications.

Let me know if you'd like this as a slide, infographic, or want to expand it into a documentation page or training note!