This course teaches you how to use the IBM Agent Builder software to create, modify, debug, and package agents for use with IBM Performance Management and IBM Tivoli Monitoring products. You create agents that monitor many different data sources. You learn to mix, match, and manipulate monitored data to create custom data points to monitor. You also learn to add custom components specific to the different IBM monitoring environments. IBM Agent Builder can create custom agents for both the IBM Tivoli Monitoring 6.x and IBM Performance Management 8.x on-premises and SaaS environments. This course is applicable to students from either environment, and a single class might have students from each environment.

Skills Gained

After you complete this course, you should be able to perform the following tasks:

- Describe the IBM Agent Builder application and the kinds of agents you can create.
- Describe the basic process of creating a custom agent with Agent Builder.
- Troubleshoot an Agent Builder agent during the development process and after installation.
- Create agents for both the IBM Tivoli Monitoring and IPM Performance Management environments.
- Create and test agents that monitor the availability of resources, such as processes, Windows services, command return codes, and network devices.
- Create and test agents that monitor events from log systems, log files, and SNMP.
- Create and test agents that monitor data from server technologies.
- Create and test agents that monitor data from custom technologies, such as scripts, log files, Java applications, and socket connections.
- Create and test agents that include remote monitoring, custom attributes, derived attributes, Navigator groups, user-entered configuration information, and TEP components, such as queries, situations, and workspaces.
- Create and test agents that use subnodes to optionally monitor local or remote data sources.

Who Can Benefit

This intermediate course is for agent developers, system administrators, and application administrators who need to create agents to gather custom data and integrate that data into either an IBM Tivoli Monitoring 6.x, IBM Monitoring 8.x on-premises, or IBM Monitoring 8.x software-as-a-service environment.
Prerequisites

Before taking this course, you should have the following skills:

- Basic understanding of Windows data sources, including WMI, Perfmon, Windows logs, Windows services, and Windows processes
- Basic understanding of multiplatform data sources, such as SNMP, JMX, processes, scripts, commands, and log files
- Administrator-level skills in either of the following monitoring environments:
  - IBM Monitoring 8.x on premises or IBM Monitoring 1.2.x software-as-a-service
  - IBM Tivoli Monitoring 6.x, including creating queries, situations, Navigators, and workspaces
- Experience installing, configuring, starting, and stopping agents and application support in either of the following monitoring environments:
  - IBM Monitoring 8.x on premises or IBM Monitoring 1.2.x software-as-a-service
  - IBM Tivoli Monitoring 6.3
- Administrator-level skills in Windows and Linux

Course Details

Introduction to IBM Agent Builder

- Introduction to Agent Builder
- Installing Agent Builder
- Introduction to the Agent Builder application

Agent creation basics

- Creating an agent in Agent Builder
- Monitoring Windows services
- Troubleshooting in Agent Builder

Creating agents for IBM Performance Management

- Creating agents for IBM Performance Management
- Filtering data sources
- Installing an agent with installation scripts
- Troubleshooting IBM Performance Management agents

Creating agents for IBM Tivoli Monitoring

- Installing an agent in an IBM Tivoli Monitoring environment
- Troubleshooting IBM Tivoli Monitoring agents
- Creating and importing ITM application support

Monitoring Windows resources
- Monitoring processes and command return codes
  - Monitoring processes
  - Monitoring command return codes

Monitoring custom data sources

- Monitoring script output
- Monitoring through a socket connection
- Defining attributes
- Creating derived attributes
- Generating agent output from the command line
- Monitoring log files
- Custom runtime configuration
- Java API

Monitoring remote and optional resources

- Data source-provided runtime configuration
- Subnodes
- Monitoring remote systems
- Monitoring Simple Network Management Protocol
- Monitoring HTTP URLs and objects
- Monitoring Java Management Extension
- Monitoring databases with JDBC