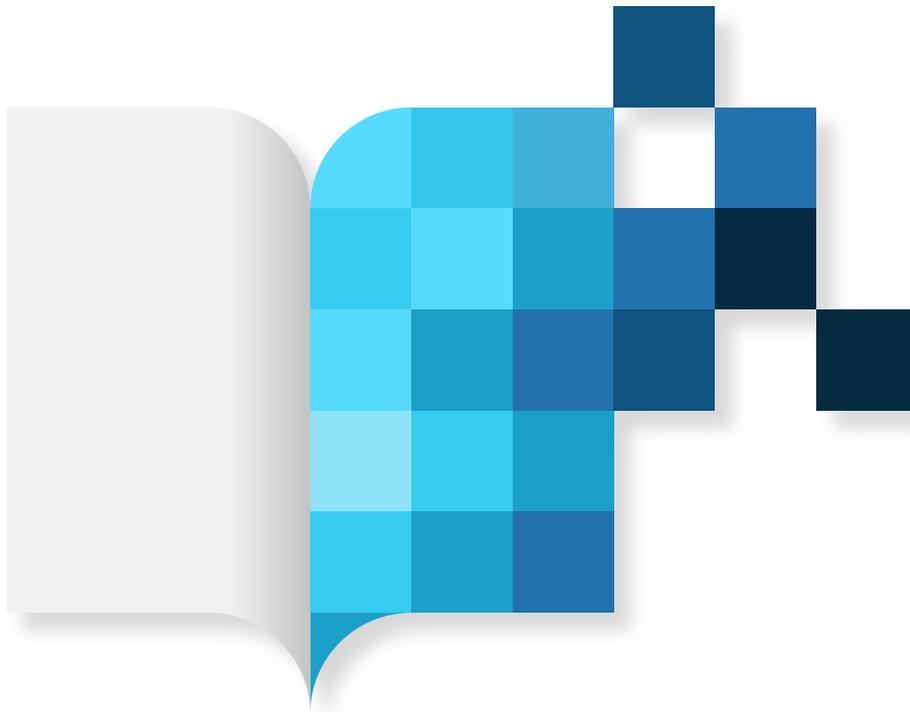


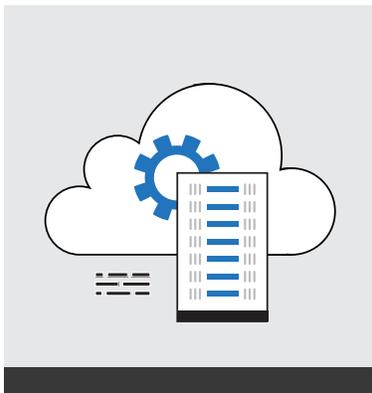
JAMS UNIVERSITY

Course Overview



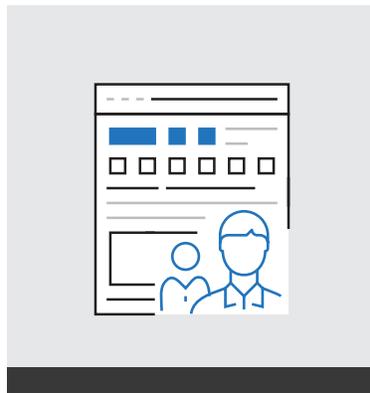
Overview

JAMS University provides technology professionals with the skills needed to orchestrate workload automation across multiple platforms and applications. Trainees will learn how to take batch jobs that run across a variety of technology siloes and bring them into a centralized management solution. Once trainees master basic principles of automation, they will learn to combine individual jobs into resilient, multi-step workflows that help enterprises maximize the value of technology investments.



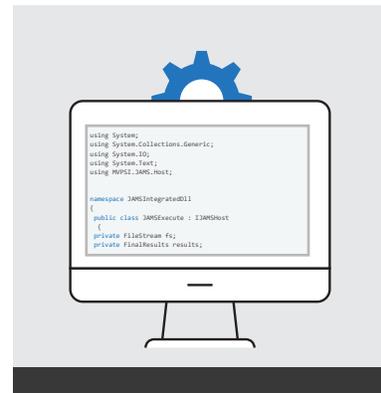
Administrator

Modules in the Administrator concentration prepare administrators and their teams to install and configure JAMS for an enterprise.



Operator

Modules in the Operator concentration focus on defining, managing, and monitoring jobs.



Developer

Modules in the Developer concentration are for technical users who would like to leverage JAMS programmatically, from within scripts and custom applications.

Focused, Hands-on Training

A typical engagement consists of Administrator and Operator modules delivered over the course of 3 days, on-site, at our training facility. Each module takes 1-2 hours to complete. Trainees will work on a large-scale demo environment.

Workload Automation Curriculum

Administrator Modules

A101 – Installing and Configuring JAMS

A102 – Cloud and Container Deployments

A103 – Fault Tolerance and High Availability

A104 – The JAMS Services

A105 – Security and Roles

A106 – Migration and Conversion

Operator Modules

U101 – Introduction to Automation and Monitoring

U102 – Introduction to Workflows

U103 – Managing the Schedule

U104 – Error Handling

U105 – Job Resiliency

U106 – Automation Distribution

U107 – Reports and Dashboards

U108 – Beyond the GUI – Programmatic Automation

Developer Modules

A101 – Installing and Configuring JAMS

A102 – Cloud and Container Deployments

A103 – Fault Tolerance and High Availability

Administrator Modules

A101 – Installing and Configuring JAMS

Install and configure JAMS – on-premises, cloud, or hybrid.

Learn how to install the JAMS Scheduler and Agents on-premises and on virtual machines. This module will cover hardware specifications, database configurations, and connection settings for the job types your organization typically runs. Trainees will also learn how to isolate JAMS for optimal performance, and how to perform an upgrade.

A102 – Cloud and Container Deployments

Learn the ins and outs of deploying JAMS for the cloud.

Learn how to take advantage of cloud-native technologies to build out the best JAMS environment possible. Learn how to build resiliency into JAMS Servers and Agents, properly load balance environments, and segregate environments according to security and compliance requirements. Trainees will also learn how to avoid upgrade failures, and how to use tools such as Puppet, Chef, and Ansible to automate a JAMS deployment.

A103 – Fault Tolerance & High Availability

Build a fault tolerant JAMS environment.

Learn tips and tricks for making JAMS highly available, and how to harden it against common network issues. The course will outline architectures that minimize the impact of issues such as SQL outages and maintenance windows. Trainees will learn how to configure a failover instance of JAMS capable of a seamless takeover of the primary scheduler. They will also develop an action plan for bringing a primary scheduler back online.

A104 – The JAMS Services

Understand the service layers of JAMS.

Learn how the JAMS services communicate and interact with each other. Learn various hooks that JAMS has with the operating system (OS), and the APIs its services utilize to communicate with the OS. Learn how Agents communicate with the Scheduler, and how JAMS encrypts and transmits secure packets between the JAMS Agent service/daemon and the server.

A105 – Security and Roles

Secure your JAMS installation.

Learn best practices for organizing jobs into logical folders, utilizing tenants, defining service accounts, and creating AD Groups that reflect your organization's roles and security requirements. Discover how to quickly and easily add new folders and tenants, and how to add and remove operator privileges on different objects within JAMS. Explore a variety of tactics for locking down individual sections of the GUI, and for configuring a variety of admin-level roles.

A106 – Migration and Conversion

Prepare your jobs for a seamless transition to centralized workload automation.

Prepare any set of jobs for migration into JAMS. Trainees will learn how to discover, parse, and convert jobs from Windows Task Scheduler, SQL Agent, and Cron using built-in conversion utilities. They will then explore various strategies for migrating jobs from legacy schedulers and homegrown scheduling tools.

Operator Modules

U101 – Introduction to Automation and Monitoring

Start defining and executing jobs.

This course will teach trainees efficient and reliable approaches to defining jobs and workflows. They will learn best practices for security, source control, and naming conventions.

Trainees will then explore a variety of methods for submitting jobs to the schedule, beginning with basic concepts such as “hourly” and “daily”. They will then move on to define triggers that enable jobs to run based on events, such as completion of other jobs and availability of files.

U102 – Introduction to Workflows

Build multi-step processes.

The Workflows course teaches trainees how to use individual jobs as building blocks in multi-step processes. They will learn the benefits of running jobs in sequence and will explore options for running steps in parallel. This course will also introduce trainees to activities that can be inserted into a workflow.

U103 – Managing the Schedule

Master the tools that keep jobs running smoothly.

In this course, trainees will learn how to monitor, collect, and distribute their jobs’ performance data. Trainees will configure custom monitors that are focused on specific sets of jobs, and organized by business function, department, region, application, or other category. Instructors will share examples of various monitor configurations that have been used by customers to manage jobs running in a variety of environments.

Following the monitoring portion of the course, trainees will learn how to distribute useful notifications about the status of jobs. They will learn how to configure email, SMS, phone, and monitoring framework alerts.

U104 - Error Handling

Discover root causes. Keep your schedule on track.

This course will dive deep into errors and exceptions that can interfere with automated workloads. Trainees will learn how to analyze log files and spot common causes of job failures. They will have the opportunity to examine sample error logs and standard out generated by a wide variety of platforms and applications.

Trainees will learn best practices for re-submitting jobs with minimal impact on the overall schedule, and how to conduct a root cause analysis on a failed job.

U105 - Job Resiliency

Design jobs to handle exceptions beyond your control.

In this course, trainees will learn how to design jobs that are primed for success – regardless of the conditions under which they run. Trainees will master techniques for distributing jobs across available resources, dividing job executions into batch queues, adding retries, and creating dedicated recovery jobs.

U106 – Automation Distribution

Distribute automation to more operators, while retaining security and control.

Learn how to make JAMS functionality available to users and groups beyond core administrators. Trainees will analyze the needs of various roles in their own organization, then customize the way operators in those roles can access the schedule, run jobs, run reports, monitor jobs, and receive notifications.

U107 – Reports and Dashboards

Illuminate the trends that impact the way your enterprise automates.

Trainees will develop the skills needed to produce static reports and dynamic dashboards. The course begins with a deep dive into the statistics JAMS captures. Trainees will learn how to use native JAMS reporting tools to create job completion reports, job failure reports, and common audit reports. Trainees will then learn how to build real-time dashboards that display job statistics and calculated measures in a variety of graphs, tables, and charts. Instructors will assist trainees with the definition of a variety of KPIs (key performances indicators) such as SLA time, uptime, and mean time to resolution, all of which can be calculated using aggregated JAMS data.

U108 – Beyond the GUI

Integrate JAMS functionality directly into your custom applications and scripts.

In this course, trainees will receive a primer on accessing JAMS functions without opening the GUI. Trainees will create jobs, submit jobs, and get the status of jobs using programmatic methods, such as PowerShell scripts, shell scripts, and .NET controllers. A full tour of the JAMS REST API will be included. No programming experience is required.

Developer Modules

Developer modules are available upon request. Trainees must have development experience with the respective technologies.

D101 – PowerShell for JAMS

Explore the full catalog of JAMS automation cmdlets and customize your IDE for quick access to jobs, folders, and resources.

D102 – JAMS APIs

Learn how the JAMS REST and .NET APIs enable you to automate tasks on nearly any application.

D103 – Docker Agents

Master large-scale agent deployments using Docker containers.

What to Expect in the Classroom

Computers

Please bring your own laptop. All other training materials will be provided.

Meals and Accommodations

Lunch, coffee/tea, and refreshments are included. Trainees should make their own travel arrangements.

Certification

Trainees who successfully complete their training session will be recognized as a **Certified JAMS Workload Automation Professional**.



About HelpSystems

Organizations around the world rely on HelpSystems to make IT lives easier and keep business running smoothly. Our software and services monitor and automate processes, encrypt and secure data, and provide easy access to the information people need.

Travel to Our Training Facility

Address & Phone

HelpSystems

29 Mill Street
Unionville, CT 06085

800-261-5267

Follow signs for MVP Systems Software

Parking & Ground Travel

Free parking is available if you choose to rent a car. Taxis, Uber, and Lyft serve Unionville, Farmington and the Metro Hartford area.

Air Travel

The nearest airport is **Bradley International Airport**. A taxi from the airport takes 40 – 60 minutes, depending on traffic.

Nearby Hotels

Residence Inn Hartford Avon

55 Simsbury Road
Avon, CT 06001

(860) 677-2821

Homewood Suites by Hilton

2 Farm Glen Boulevard
Farmington, CT 06032

(860) 321-0000



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