

Fall 2022 IBM Automation and Data & AI OPEN Labs

Target to better *LEARNING*



Save the Date!

Sept 20th, 2022
8:30 AM EST – 4 PM EST
Downtown DC
(In Person)

Click to register and for more details.



[Fall 2022 IBM AUTOMATION AND DATA & AI OPEN LABS - DC](#)

Agenda

- ✓ 08:30 AM – 09:00 AM Meet and Greet
- ✓ 09:00 AM – 10:30 AM Data and AI Presentations & Discussions
- ✓ 10:30 AM – 11:30 AM AIOps and Integration Presentations & Discussions
- ✓ 11:30 AM – 12:00 PM Business Automation Presentation & Discussion
- ✓ 12:00 PM – 12:30 PM Lunch
- ✓ 12:30 PM – 04:00 PM Hands-on Labs

Please note: Participants are responsible for their business travel expenses, including parking, breakfast, and lunch.

IBM Innovation Center



Fall 2022 IBM Automation and Data & AI OPEN Labs

Lectures & Discussions – 09:00 AM – 12:00 PM

* Each lecture is about half hour long

Data and AI Lectures (09:00 AM – 10:30 AM)

- Cloud Pak for Data: Organize and Infuse AI & Data Analytics to drive your digital transformation
- IBM Cognos Analytics and Planning Analytics: Leverage AI to Automate, Visualize, Budget, and Forecast
- IBM Watson Services: E2E AI – Applied Precision Medicine – Custom Modeling

AIOps, Integration and Business Automation Lectures (10:30 AM – 12:00 PM)

- Instana and Turbonomic: Observability & Application Resource Management- Everything you need for Intelligent IT
- IBM MQ: Where Are We Headed?
- IBM Automation Electronic Records Keeping: Comply with M-19-21 directive, Transition to Electronic Records

Click to register and for more details.



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Fall 2022 IBM Automation and Data & AI OPEN Labs

Hands-On Workshops – 12:30 PM – 04:00 PM

Data and AI

- IBM Cognos Analytics: Accelerate, Automate, Visualize and Report on Data
- IBM Watson technologies: Disseminating up-to-date COVID-19 information to citizens

AIOps, Integration and Business Automation

- Instana – Enterprise Observability Platform
- Introduction to IBM MQ
- IBM MQ High Availability: Multi-Instance Queue Managers and Replicated Data Queue Managers (RDQMs)
- IBM Process Mining: Apply data science and process analytics to discover, validate and improve workflow

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Fall 2022 IBM Automation and Data & AI OPEN Labs

Morning Session

Lectures and Discussions Details

09:00 AM – 12:00 PM



Cloud Pak for Data: Organize and Infuse AI & Data Analytics to drive your digital transformation

- ✓ Predict outcomes faster using a platform built with data fabric architecture.
- ✓ Collect, organize and analyze data, no matter where it resides.
- ✓ Connect the right data to the right people at the right time.

- ✓ IBM Cloud Pak® for Data platform helps improve productivity and reduce complexity. Build a data fabric connecting siloed data distributed across a hybrid cloud landscape.

- ✓ This product offers a wide selection of IBM and third-party services spanning the entire data lifecycle. Deployment options include on-premises software version built on the Red Hat® OpenShift® container platform, or a fully managed version built on the IBM Cloud®.

Topics

- ✓ A presentation and discussion on the capabilities of this offering.

Products

- ✓ IBM Watson Knowledge Catalog



IBM Cognos and Planning Analytics: Leverage AI to Automate, Visualize, Budget, and Forecast

The IBM Planning Analytics workshop gives you the opportunity to discover the ease of use available with the IBM Planning Analytics toolset. You will explore how easily you can adapt these toolsets to drive better business outcomes.

Your instructor will explain and demonstrate various Planning Analytics data exploration and view capabilities. Then, go hands-on and prove the business value of the Planning Analytics toolset for yourself. You will take on the role of Business User and will gain valuable insights and discover the ease with which you can get the analysis your organization needs using Planning Analytics.

Topics	Products
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<ul style="list-style-type: none"> ✓ Presentation on the products' capabilities and applicability in today's environment 	<ul style="list-style-type: none"> ✓ IBM Cognos Analytics ✓ IBM Planning Analytics
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 **IBM Watson Services: E2E AI – Applied Precision Medicine – Custom Modeling**

Applied Precision Medicine – Custom Modeling: The National Institutes of Health describes precision medicine as ‘an emerging approach for disease treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person.’ It is a field in which new deep learning strategies are being applied alongside traditional analytic approaches along with an abundance of open source and commercial bioinformatic tools with which to analyze gene sequences, engineer proteins, and discover the personalized treatment. To extend precision medicine and apply it to your operation, your researchers, data scientists, and machine learning developers need to get beyond what pre-built models and automated AI tools can provide.

Topics	Products
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- ✓ State-of-the-art tools for data governance
- ✓ Collaboration
- ✓ End-to-End AI development
- ✓ Support for Python and R notebook-based development

- ✓ IBM Watson Studio
- ✓ IBM Watson Machine Learning



Instana & Turbonomic: Everything you need for Intelligent IT- Observability & Application Resource Management

Make Observability Enterprise-Ready to help optimize your cloud-native and legacy application performance.

Automate discovery, mapping and configuration with zero human configuration
 Monitor services, trace requests and profile processes
 Deliver AI-assisted troubleshooting to predict incidents and automate remediation

Topics	Products
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- ✓ Observability Introduction
- ✓ Introduction to Instana
- ✓ Solving a Backend Service Incident
- ✓ Solving a Frontend Incident
- ✓ Observability & DevOps
- ✓ Instana Architecture
- ✓ Focus on what matters to you (App perspectives)
- ✓ Monitor a Software
- ✓ Observability & AIOps
- ✓ Demo Watson AIOps & ChatOps
- ✓ Wrap-up

✓ IBM Instana and IBM Turbonomic



IBM MQ: Where Are We Headed?

IBM MQ is messaging and queuing middleware, with point-to-point, publish/subscribe, and file transfer modes of operation. Applications can publish messages to many subscribers over multicast.

In this session, we will present the IBM MQ Roadmap and the list of the latest features and capabilities.

Topics

✓ Discuss IBM MQ Roadmap

Products

✓ IBM MQ



IBM Automation Electronic Records Keeping: Comply with M-19-21 directive, Transition to Electronic Records

What it is: All permanent records in Federal agencies will be managed electronically to the fullest extent possible for eventual transfer and accessioning by NARA in an electronic format.

Who it affects: The memorandum directs all Federal agencies to:

- ✓ Ensure that all Federal records are created, retained, and managed in electronic formats, with appropriate metadata
- ✓ Consistent with records management laws and regulations, develop plans to close agency-operated storage facilities for paper and other analog records, and transfer those records to Federal Records centers operated by NARA or commercial storage facility

Topics	Products
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- ✓ Capture
- ✓ Maintenance and Use
- ✓ Disposal
- ✓ Transfer
- ✓ Metadata
- ✓ Reporting

✓ IBM Cloud Pak for Business Automation

Fall 2022 IBM Automation and Data & AI OPEN Labs

Afternoon Session

**Hands-on Labs
Details**

12:30 PM – 04:00 PM


IBM Cognos Analytics: Accelerate, Automate, Visualize and Report on Data

The IBM Cognos Analytics workshop allows you to discover the ease of use of the market-leading analytics toolsets. Learn how easily you can adapt the Cognos Analytics dashboards to your employees and create reports designed with business analytics to help drive better business outcomes. Your instructor will explain and demonstrate various capabilities within Cognos Analytics. Then, go hands-on and prove the business value of the two toolsets for yourself. Take on the roles of casual, advanced, and line of business users. Gain valuable insights and discover the ease with which you can get the business intelligence your organization needs requires analytics tools. In the Cognos Analytics labs, you will take on the role of casual and advanced users to interact with the Cognos portal, view and interact with reports, modify reports and build simple yet professional-looking dashboards with Smart Analytics and AI-guided discovery. You will also take on the line of business user to show how Cognos Analytics allows the user to quickly have access to data and therefore not have as much reliance on the I.T. department, yet still have the security and data governance by doing some simple data modeling showing how you can combine data sources for more insights into your organization. In the Cognos Analytics labs, you will be able to explore how to build reports and see how the Cognos technology can guide your analysis and show you things you may not have been aware of.

Labs

- ✓ Introduction
- ✓ Cognos Analytics
- ✓ Navigation and Search
- ✓ Dashboard Development
- ✓ Analyzing Personal Datasets
- ✓ Intent-Driven Modeling
- ✓ Data Discovery and Preparation
- ✓ Creating Calculations and Custom Groups
- ✓ AI-Driven Data Exploration
- ✓ ML Recommended Visualizations
- ✓ Report Creation with new Layout and Styling
- ✓ Report Execution and Scheduling
- ✓ Summary

Products

- ✓ IBM Cognos Analytics software



IBM Watson technologies: Disseminating up-to-date COVID-19 information to citizens

The impact of COVID-19 is widespread. Industry and Government planners need capabilities to monitor the COVID-19 surges and measure the current impact on their businesses and communities. Forecasting the demand for resources and formulate plans to optimally allocate these resources is critical as is disseminating up-to-date information to their citizens, employees, suppliers, and customers. This workshop is to teach attendees how to combine different technologies such as Artificial Intelligence (AI), Machine Learning (ML), Natural Language Processing (NLP), and optimization to support the above capabilities.

Objectives

- Extract information from the text and create knowledge to inform planners about events
- Create 'chat-bots' that act on this knowledge to answer user questions
- Analyze current drivers to forecast future conditions
- Develop optimized approaches based on forecasted conditions
- Develop dashboards to provide insights to planners.

Labs

- ✓ Develop socio-economic annotators to extract domain-specific information.
- ✓ Create a knowledge management system (KMS), ingest data, train the KMS to generate knowledge and synthesize a COVID-19 stability index
- ✓ Develop a COVID-19 Chatbot Assistant to answer questions about COVID-19.
- ✓ Forecast the demand for resources, and then optimally allocate these resources based on the demand.
- ✓ Implement a dashboard that displays COVID-19 statistic

Products

- ✓ IBM Watson Discovery
- ✓ IBM Watson Knowledge Studio
- ✓ IBM Watson Assistant



Instana: Enterprise Observability Platform

Real Time Observability reduces redundancies w/ immediate software deployment & feedback. Instana is a fully automated APM solution for cloud-native, multi-cloud and hybrid cloud applications. You automatically discover application building blocks, trace every request and create a dynamic graph of all dependencies.

Labs	Products
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- ✓ Introduction to Instana
- ✓ What keeps things complicated?
- ✓ What Is Observability?
- ✓ Solving a Backend Service Incident
- ✓ Solving a Frontend Incident
- ✓ Focus on what matters to you (App perspectives)
- ✓ Monitor a Software Release
- ✓ Please bring up questions, feedback and comments

-IBM Instana



Introduction to IBM MQ

You can use IBM MQ to enable applications to communicate at different times and in many diverse computing environments.

IBM MQ is messaging for applications. It sends messages across networks of diverse components. Your application connects to IBM MQ to send or receive a message. IBM MQ handles the different processors, operating systems, subsystems, and communication protocols it encounters in transferring the message. If a connection or a processor is temporarily unavailable, IBM MQ queues the message and forwards it when the connection is back online.

An application developer has a choice of programming interfaces, and programming languages to connect to IBM MQ.

IBM MQ is messaging and queuing middleware, with point-to-point, publish/subscribe, and file transfer modes of operation. Applications can publish messages to many subscribers over multicast.

Topics	Products
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- ✓ Introduction to IBM MQ
- ✓ Create Queue Managers
- ✓ Work with Queues (create, test, browse, delete)
- ✓ Connect queue managers using channels, and explore distributed queuing
- ✓ Create a Queue Manager Group (or Set)
- ✓ Administer a Group of Queue Managers Collectively
- ✓ Use Filters

-IBM MQ



IBM MQ High Availability: Multi-Instance Queue Managers and Replicated Data Queue Managers (RDQMs)

If you want to operate your IBM® MQ queue managers in a high availability (HA) configuration, you can set up your queue managers to work either with a high availability manager, such as PowerHA® for AIX® (formerly HACMP™) or the Microsoft Cluster Service (MSCS), or with IBM MQ multi-instance queue managers.

With IBM MQ v9.0.4 on Linux systems, you can also deploy replicated data queue managers (RDQMs), which use a quorum-based group to provide high availability.

Topics

- ✓ Lab Introduction
- ✓ Starting the images
- ✓ Setting up the Network File System Server
- ✓ Setting Up Network File System Clients
- ✓ Setting Up Client Reconnect
- ✓ MQ Explorer
- ✓ More Failover Tests
- ✓ Summary

Products

-IBM MQ



IBM Process Mining: Apply data science and process analysis to discover, validate, and improve workflow

During this exercise, you import and map data from a local CSV file. You review the data and visualize the process model. You then explore the workspace environment and how to navigate the various analysis features of IBM Process Mining.

Objectives: After completing this exercise, you should be able to:

- Generate the event log by uploading and mapping data
- Create and visualize a process
- Review the log statistics and model details of a process
- Drill down to a specific activity
- Apply a filter to a process
- Create activity aliases
- View the frequency, duration, and cost models of a process
- View process and case statistics
- Animate a process
- Review resource usage in the Activity Map
- Use the Social net feature to understand data relationships
- Import and interact with custom dashboards

Labs

Products

- ✓ Overview of IBM Process Mining
- ✓ Create a process and import a data source
- ✓ Model and Analyze the process
- ✓ Explore other features of IBM Process Mining
- ✓ Wrap-up

- ✓ IBM Process Mining