	Agenda
9.00 – 9.15	Opening Session
9.15 - 9.45	Enterprise Grade Cloud As enterprises increasingly embrace Hybrid Cloud as an important IT strategy, they face varied challenges and decisions. Their Cloud solutions must meet the requirements of IT, Line of Business managers, and developers – even though those requirements may differ significantly. It is quite likely that a variety of Cloud technologies and services will be needed – some combination of on-premises private with public IaaS, PaaS, or SaaS. This introductory module provides an overview of the comprehensive IBM Cloud portfolio and IBM Hybrid Cloud infrastructure, which will be explored in more detail in the subsequent modules: • World Class and differentiated off-premises Cloud infrastructure, including options for shared virtualized (multi-tenant), dedicated virtualized (single-tenant), and bare metal • World Class systems for on-premises cloud with high availability, high scalability, and high performance • Open standards-based management solutions that provide visibility and control, reducing operational costs and significantly increasing business flexibility, with hybrid cloud capabilities that let companies manage and deploy in a consistent way across a wide variety of cloud platforms • Solutions to standardize, simplify and reduce risk for application deployments, while providing extended portability across multiple cloud environments • Comprehensive Security framework to manage access, protect data, identify threats, and optimize Security operations across hybrid cloud environments • Integration and Data Services capabilities to securely connect, seamless manage and tightly integrate on-premises and off-premises workloads
9.45 – 10.30	World Class Infrastructure: Off-premises Cloud SoftLayer provides unique Cloud infrastructure capabilities for off-premises Cloud. Like most other Cloud service providers, SoftLayer offers a shared virtualized environment. This multi-tenant platform yields the best economics while still providing customer control and security. Unlike other Cloud service providers, SoftLayer goes beyond that with two additional offerings. First, SoftLayer offers a dedicated virtualized environment. With this platform, a server and hypervisor are dedicated to the customer; no other customers would be sharing the machine or its resources. Second, SoftLayer offers bare-metal servers. The customer can build their own software stack on the server, from the Operating System on up. These flexible platform options ensure that customers can implement a public Cloud solution in the manner that best suits their needs. To go along with those hardware and software options, IBM also offers options for partially or fully managed solutions. You can elect to have a dedicated team of certified engineers and cloud experts to build, monitor, adjust, and report on the overall performance of your infrastructure.
10.30 – 10.45	Coffee Break

10.45 – 11.15	World Class Infrastructure: On-premises Cloud IBM Compute infrastructure is provide superior infrastructure for the cloud because of their ability to scale-out and scale-up, with better Reliability, Availability, and Serviceability (RAS). Compared to Intel-based servers: • IBM Power Systems servers provide superior infrastructure for the cloud because of their ability to deliver higher performance and more efficient virtualization, resulting in lower cost per workload and reduced operational cost. • IBM zSystems provide dedicated I/O, higher memory and superior workload management capabilities to efficiently and cost-effectively operate cloud workloads alongside traditional mainframe applications. IBM Spectrum Storage addresses multiple approaches to handling the explosion of data that an organization has to store and manage with cloud. Three big IT trends driving cloud storage are Mobile, Cloud, and Big Data. All three are causing an explosion in the amount of data that an organization has to store and manage. This module focuses on the options IBM offers for cloud storage, examining three approaches that can be used in any combination: • use a high-end disk storage system that stands out for tuning-free predictable high performance, an exceptional user experience, and excellent data economics • repurpose a mix of existing heterogeneous storage devices to become a unified virtual aggregate • build up a global storage pool on distributed commodity hardware The IBM products and services that will be discussed include IBM Spectrum Accelerate, IBM XIV, IBM Spectrum Virtualize, IBM FlashSystem, and IBM Spectrum Scale.

11.15 – 11.50	Operational Visibility and Control: Management

Properly implementing a Cloud platform requires a standardized, programmable approach. Through standardized programming interfaces (APIs), compute, networking, and storage assets become logical resources that can be can be deployed and managed across all of the infrastructure, whether on-premises or off-premises. Standardized access allows customers to deploy workloads to a hybrid mixture of private and public cloud implementations to:

• Hit the right balance of risk to speed,
• Innovate and add new capabilities quickly,
• Match workloads to best-fit infrastructure
• Meet seasonal capacity without capital expense
• Maximize return on existing IT investments

IBM is building its cloud software on the fastest growing open technology – OpenStack. OpenStack provides the core platform for Cloud; on top of that IBM offers additional software that can improve and optimize the OpenStack environment:

• With IBM Cloud Manager for OpenStack, customers can easily manage OpenStack deployments across a wide range of platforms – x86 with Hyper-V, vCenter, or KVM; IBM Power Systems with PowerVC or KVM; and System z with zVM. IBM Platform Resource Scheduler adds intelligence and runtime optimization to OpenStack's standard workload placement capabilities, and IBM Cloud Services for OpenStack allows customers to deploy a seamlessly managed hybrid OpenStack cloud that spans on-premises and off-premises resources.

• With IBM Cloud Orchestrator, customers can standardize, automate and manage all the domains associated with virtual systems end-to-end including the associated business processes. |
| 11.50 – 12.00 | Coffee Break |

12.00 – 12.30	**Extended Portability: Patterns and Containers**

Deploying applications reliably and quickly across multiple cloud environments is a significant challenge for IT–requiring significant expertise, coordination of multiple images, and separate management environments for each cloud. Standardizing creation, deployment and control over hybrid application environments enables the administrator to consistently deploy much faster and with far less risk.

• PureApplication System, PureApplication Service, and PureApplication software provides customers the capability to automate and standardize the creation and deployment of virtual systems (comprising multiple virtual machines) that would formerly require large amounts of system administrator's time to deploy and configure – and do so seamlessly across multiple cloud environments.

• UrbanCode Deploy with Patterns allows developers to leverage the PureApplication infrastructure's standardization benefits, while maintaining agility and control over the underlying code.

• Enterprise Containers based on Docker technology can be utilized with virtual systems, providing the developer with ultimate portability and speed. |

12.30 – 12.55	**Security** Security for traditional IT infrastructures is typically manual and static. With the dynamic nature of Cloud computing, that is not sufficient. Security in Cloud environments must be automated, agile, and elastic. It is important for companies to be able to not only secure their own Cloud infrastructures, but also understand and control how their employees are using Cloud services. To implement security for Cloud environments, it is necessary to address the following areas, at a minimum: • People (identity & access management) • Data (at the database and physical compute / storage levels) • Infrastructure (primarily network, such as intrusion detection) • Application (application level security, such as checking for vulnerabilities in code) In addition, it is vital to constantly monitor for security breaches and compliance violations. The most effective way to do that is to dynamically analyze the security posture of users, applications, networks, and other assets across the enterprise and in the cloud. Correlating suspicious behavior across the components enhances the ability to identify security threats and to shut them down. The IBM products and services that will be discussed include Tivoli Federated Identity Manager, IBM AppScan, Guardium Data Security, and IBM QRadar Security Intelligence Platform.
12.55 – 13.25	**Integration and Data Services** Integrating new off-premises Cloud applications with on-premises Systems of Record will be a key requirement for IT administrators. The IT administrator faces a number of challenges in this regard: • Establishing a secure connection • Scaling of client connections • Filtering of operations available from Systems of Record • Data synchronization across clouds • Ease of consumption for developers The IBM products and services that will be discussed include IBM BlueMix, IBM CastIron, and IBM API Management.
13.25 – 14.30	Lunch