



Build a Technical Team

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Technical Resources (Architecture, Infrastructure, and Development)

These roles form the heart of your Azure solution. Hiring the right people can turn your vision into reality.

A **Cloud Architect** (CA) drive Azure based customer initiatives in collaboration with customers, and participates in both pre and post-sales (e.g., deployment) efforts. The CA is a technical, customer facing role that is accountable for the end-to-end customer cloud deployment experience. CAs own the Azure technical customer engagement including: architectural design sessions, specific implementation projects and/or Proofs of Concepts, and deployment. The ideal candidate will have experience in customer facing roles and success leading deep technical architecture and application design discussions with senior customer executives to drive cloud deployment. A computer science or related engineering degree is required.

A **Data Architect** (DA) drives customer initiatives leveraging Azure data and analytics services (e.g., ranging from SQL Server to SQL Database and SQL Data Warehouse to Cortana Intelligence Suite) to solve the biggest and most complex data challenges faced by enterprise customers. The DA is a technical, customer facing role, accountable for the end-to-end customer deployment and usage experience for Azure data services. DAs own the Azure technical customer engagement including: architectural design sessions, implementation projects and/or proofs of concept and pilots. The Data Architect is proficient in distributed computing principles and familiar with key architectures including Lambda and Kappa architectures, and has a broad experience designing solutions using a broad set of data stores (e.g., HDFS, Azure Data Lake Store, Azure Blob Storage, Azure SQL Data Warehouse, Apache HBase, Azure DocumentDB), messaging systems (e.g., Apache Kafka, Azure Event Hubs, Azure IoT Hub) and data processing engines (e.g., Apache Hadoop, Apache Spark, Azure Data Lake Analytics, Apache Storm, Azure HDInsight). The ideal candidate will have experience in customer facing roles and success leading deep technical architecture and design discussions with senior executives. Five plus years of experience with deep understanding of databases and analytics, including relational databases, data warehousing, big data, business intelligence and analytics. Five plus years of success in consultative/complex technical sales and deployment projects. Technical BS degree in Computer Science or Math background desirable.

A **Data Scientist** is responsible for identifying the insight opportunities present in the customer's data, and helping shape the data pipeline that deliver the insights by applying advanced analytics (e.g., machine learning) in collaboration with the customer. The Data Scientist is a technical, customer facing role, who along with the Big Data Engineer is accountable for the end-to-end data pipeline envisioning and development that starts with addressing issues of data acquisition and data sampling, data exploration and data quality assessment, data wrangling to massage the data so it is better suited to applying advanced analytics, and visualizing or reporting on such data to make the insights available to the customer's business. The ideal candidate will have experience in customer facing roles and has a cross-disciplinary background consisting of statistics and software development. A technical BS degree in Computer Science or Math background is highly desirable. Three or more years customer facing experience desired.

A **Big Data Engineer** is responsible for helping to select and implement the tools and processes required of a data processing pipeline in support of the customer requirements. The Big Data Engineer may be a customer facing role, but the primary responsibilities include implementing ETL (extract, transform and load) pipelines, monitoring/maintaining data pipeline performance. The Big Data Engineer is proficient in distributed computing principles and familiar with key architectures including Lambda and Kappa architectures, and has a broad experience across a set of data stores (e.g., HDFS, Azure Data Lake Store, Azure Blob Storage, Azure SQL Data Warehouse, Apache HBase, Azure DocumentDB), messaging systems (e.g., Apache Kafka, Azure Event Hubs, Azure IoT Hub) and data processing engines (e.g., Apache Hadoop, Apache Spark, Azure Data Lake Analytics, Apache Storm, Azure HDInsight). The ideal candidate has three or more years experience working on solutions that collect, process, store and analyze huge volume of data, fast moving data or data that has significant schema variability.

A **Senior Software Developer** has a history of designing, owning and shipping software, as well as excellent communication and collaboration skills. With a focus on cloud-based application development, the candidate must have demonstrable experience architecting and deploying applications to cloud platforms, the ability to effectively integrate disparate services as needed, and decide when to implement IaaS, SaaS, and PaaS components. As a mentor to junior developers, the senior software developer should have a solid understanding of the software development cycle, from architecture to testing. They should have a passion for quality and be a creative thinker. A senior developer will write secure, reliable, scalable, and maintainable code, and then effectively debug it, test it and support it live. This person should also be comfortable owning a feature and making decisions independently, and should have leadership experience with agile

methodologies, such as the Scrum approach to agile software development.

Another aspect of a senior software developer, is that they can effectively gather customer requirements, and ask clarifying questions when needed. This person must be able to translate these requirements to actionable tasks they will perform, or delegate to members of the team.

A **Software Developer** enjoys the challenge of building applications that solve today's business needs. This person must be willing to keep up to date with the fast-moving cloud services landscape to remain an effective member of the development team. A software developer should work equally well on a team or independently, given a set of project requirements or tasks. This requires the developer to possess excellent communication and collaboration skills. The developer should understand the aspects of the software development cycle, from architecture to testing. This person will design, build, and maintain efficient, reusable, and reliable code. This person should have experience with participating in projects using agile methodologies, such as the Scrum approach to agile software development.

Job Descriptions

Job Descriptions for your Technical Team

The following tables provides detailed job descriptions you can utilize to hire the key technical resources. All technical skills, non-technical skills, certifications and technologies listed are potential items a candidate should have, but no candidate will have all the items listed.

CLOUD ARCHITECT

A CA drives high priority customer initiatives on Azure in collaboration with customers and your sales team. The CA is a technical, customer facing role that is accountable for the end-to-end customer cloud deployment experience. CAs own the Azure technical customer engagement including: architectural design sessions, specific implementation projects and/or Proofs of Concepts. The ideal candidate will have experience in customer facing roles and success leading deep technical architecture and application design discussions with senior customer executives to drive cloud deployment. Bachelor's degree in computer science or related field preferred.

Technical Skills	<ul style="list-style-type: none"> • Deep understanding of cloud computing technologies, business drivers, and emerging computing trends • Deep technical experience in infrastructure design including private and public cloud, networking, virtualization, identity, security and storage. • Understanding of how to build resilient multi-site architectures • Experience with Windows, Linux and OSS technologies • Experience with configuration management and automation technologies such as PowerShell DSC, Chef, ARM Templates, and Puppet • Working knowledge with AGILE development, SCRUM and Application Lifecycle Management (ALM) with one or more of the following programming languages: PowerShell, Bash, .NET, C++, Java, JSON, PHP, Perl, Python, Ruby on Rails
Non-Technical Skills	<ul style="list-style-type: none"> • Proven track record of building deep technical relationships with senior executives and growing cloud consumption share in large or highly strategic accounts • Proven track record of driving decisions collaboratively, resolving conflicts and ensuring follow through • Presentation skills with a high degree of comfort with both large and small audiences • Prior work experience in a Consulting/Architecture position within a software and/or services company • Problem-solving mentality leveraging internal and/or external resources • Exceptional verbal and written communication
Certifications	<p>MCSE Cloud Platform and Infrastructure, MCSA Cloud Platform Solutions Associate, MCSA Linux on Azure Solutions Associate, AWS Certified Solution Architect</p> <p>Exam priorities: Architecting Azure Solutions 70-534, 70-533 Implementing Azure Infrastructure Solutions</p>



Project Experience Types/Qualities	<ul style="list-style-type: none"> • 3-5+ years senior (Tier 3) level support with cloud infrastructure as part of responsibilities • 5+ years of architecture, design, implementation, and/or support of highly distributed applications (i.e. having an architectural sense for ensuring availability, reliability, etc.) • 2+ years of experience in migrating on premise workloads to the cloud • 5+ years of success in consultative/complex technical sales and deployment projects (where necessary, managing various stakeholder relationships to get consensus on solution/projects) • Oversight experience on major transformation projects and successful transitions to implementation support teams
Technologies	<ul style="list-style-type: none"> • Azure Virtual Machines, Virtual Networks, ExpressRoute, Azure Active Directory, Operations Management Suite, Azure Site Recovery, Azure Backup, Azure App Services, Azure Storage, Azure Import/Export, Azure SQL Database, Azure Web Jobs, Azure ExpressRoute, MySQL, SQL Server, SQL Server IaaS, SharePoint on Azure, AWS EC2, S3, DirectConnect, Hyper-V, VMWare, System Center, Citrix, StorSimple, SAN, firewalls, web app proxies, PowerShell, Bash, JSON, ARM Templates, BGP, Site-to-Site VPN, Chef, Puppet, Ansible, SaltStack, Windows Server, Linux, OSS Technologies

CLOUD INFRASTRUCTURE CONSULTANT

The Cloud Infrastructure Consultant delivers technical solutions and support to customers allowing them to maximize their investment in cloud technology. The ideal candidate will have experience in customer facing roles and success implementing cloud based solutions, migrating workloads to the cloud, and experience with connecting and managing hybrid cloud environments.

Building upon solid IT project experience relative to their level, consultants will work with customers in:

- The delivery of high quality engagements around Microsoft's solution areas, technologies and products in diverse client environments.
- Stabilizing developed solutions using Microsoft methodologies in complex customer environments.
- The design and development of integrated solutions using the latest Microsoft products and technologies.
- Understanding the relevant application development, infrastructure and operations implications of the developed solution.

Bachelor's degree in computer science or related field preferred.

Technical Skills	<ul style="list-style-type: none"> • Deep understanding of cloud computing technologies, business drivers, and emerging computing trends • Deep technical experience in infrastructure design including private and public cloud, networking, virtualization, identity, security and storage. • Understanding of how to build resilient multi-site architectures • Experience with Windows, Linux and OSS technologies • Experience with configuration management and automation technologies such as PowerShell DSC, Chef, ARM Templates, and Puppet • Working knowledge with AGILE development, SCRUM and Application Lifecycle Management (ALM) with one or more of the following programming languages: PowerShell, Bash, .NET, C++, Java, JSON, PHP, Perl, Python, Ruby on Rails
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Non-Technical Skills	<ul style="list-style-type: none"> • Services project management • Building Customer/Partner Relationships • Proven track record of driving decisions collaboratively, resolving conflicts and ensuring follow through • Presentation skills with a high degree of comfort with both large and small audiences • Prior work experience in a Consulting/Architecture position within a software and/or services company • Problem-solving mentality leveraging internal and/or external resources • Exceptional verbal and written communication
Certifications	<p>MCSE Cloud Platform and Infrastructure, MCSA Cloud Platform Solutions Associate, MCSA Linux on Azure Solutions Associate, AWS Certified Solution Architect</p> <p>Exam priorities: 70-533 Implementing Azure Infrastructure Solutions, Architecting Azure Solutions 70-534</p>
Project Experience Types/Qualities	<ul style="list-style-type: none"> • 3-5+ years senior (Tier 3) level support with cloud infrastructure as part of responsibilities • 5+ years of architecture, design, implementation, and/or support of highly distributed applications (i.e. having an architectural sense for ensuring availability, reliability, etc.) • 2+ years of experience in “migrating” on premise workloads to the cloud • 5+ years of success in consultative/complex technical sales and deployment projects (where necessary, managing various stakeholder relationships to get consensus on solution/projects) • Oversight experience on major transformation projects and successful transitions to implementation support teams
Technologies	<ul style="list-style-type: none"> • Azure Virtual Machines, Virtual Networks, ExpressRoute, Azure Active Directory, Operations Management Suite, Azure Site Recovery, Azure Backup, Azure App Services, Azure Storage, Azure Import/Export, Azure SQL Database, Azure Web Jobs, Azure ExpressRoute, MySQL, SQL Server, SQL Server IaaS, SharePoint on Azure, AWS EC2, S3, DirectConnect, Hyper-V, VMWare, System Center, Citrix, StorSimple, SAN, firewalls, web app proxies, PowerShell, Bash, JSON, ARM Templates, BGP, Site-to-Site VPN, Chef, Puppet, Ansible, SaltStack, Windows Server, Linux, OSS Technologies

IDENTITY SOLUTION ENGINEER

The Identity Solution Engineer is responsible for the design, implementation, integration, support and monitoring of enterprise identity and access control solutions. The ideal candidate should have a diverse understanding of the current state of security best practices including identity and access control, mobile technology, best practices throughout a variety of industries. In addition, this individual must have a strong knowledge of identity standards and protocols as well as a deep skillset with Windows Server Active Directory and industry security solutions. The candidate must have prior experience formulating, planning, and implementing an identity and access control strategy including formulating policies for bring your own device (BYOD) policy and remote access. The ideal candidate will have a strong understanding of network infrastructure, such as firewalls, proxies, and cross site connectivity options. Bachelor's degree in computer science or related field preferred

Technical Skills	<ul style="list-style-type: none"> • Solid understanding of modern authentication protocols and a background in cyber security • Deep understanding of cloud computing technologies, business drivers, and emerging computing trends • Experience with Windows Server Active Directory and other LDAP based directory services • Experience with Azure AD and Azure Infrastructure as a Service (Virtual Machines, Virtual Networks) • Integration and migration experience with Skype for Business, Exchange, SharePoint and Office 365 • Experience with Windows, Linux, iOS, Android, Blackberry • Experienced troubleshooter, analyzing log files, network traffic, permissions issues, identifying problems with performance and scale • Developer experience with .NET, Java, HTML, CSS, JavaScript
Non-Technical Skills	<ul style="list-style-type: none"> • Proven track record of driving decisions collaboratively, resolving conflicts and ensuring follow through • Presentation skills with a high degree of comfort with both large and small audiences • Problem-solving mentality leveraging internal and/or external resources • Exceptional verbal and written communication • Basic understanding and knowledge of PCI and SOX regulatory standards.
Certifications	<p>MCSE Cloud Platform and Infrastructure, MCSA Cloud Platform Solutions Associate, MCSA Linux on Azure Solutions Associate, CompTIA Security+, CISSP, AWS Certified Solution Architect,</p> <ul style="list-style-type: none"> • Exam priorities: Identity with Window Server 2016, 70-533 Implementing Azure Infrastructure Solutions, 70-398: Planning for and Measuring Devices in the Enterprise.
Project Experience Types/Qualities	<ul style="list-style-type: none"> • 3-5+ years senior (Tier 3) level support with identity management as part of responsibilities • 5-8 years of experience with identity architecture and management • 3-5 years deploying, migrating or managing an Office 365 environment
Technologies	<ul style="list-style-type: none"> • Azure Active Directory, Office 365, Windows Server Active Directory Domain Services, AD LDS, Rights Management Server, Microsoft Identity Manager (FIM/MIM), Active Directory Federation Services (ADFS), Active Directory Certificate Services (ADCS), Web App Proxy, Site Minder, Octa, Auth0, WebSphere, Enterprise Mobility Suite, Intune, Azure Information Protection, Azure Active Directory, OAuth, SAML, Cloud App Security, Citrix XenMobile, MobileIron, Airwatch, Blackberry, Firewalls, Office 365, Windows, Linux, iOS, Android, System Center Configuration Manager, Exchange, Skype for Business, SharePoint

Build staff on-boarding and mentoring plan

Resources



RESOURCES

- ➔ [Microsoft Virtual Academy](#)
- ➔ [IT Pro Cloud Essentials](#)
- ➔ [IT Pro Career Center](#)
- ➔ [Microsoft Azure Certification and Training](#)

Training Your Current Staff

For IT staff to function as change agents supporting current and emerging cloud technologies, their buy-in for the use and integration of these technologies is needed. For this, staff need three things:

- An understanding of their roles and of any changes to their current position
- Time and resources to explore the technologies
- An understanding of the business case for the technologies

AZURE ONBOARDING GUIDE FOR IT ORGANIZATIONS

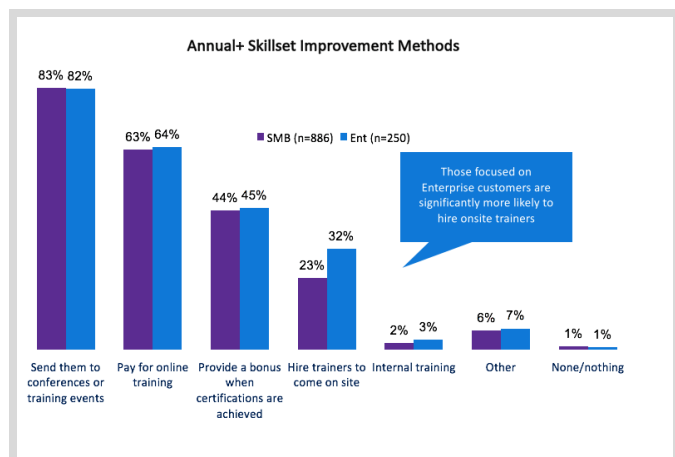
- [Azure Skills](#) provides a free online training option and great deals on certification, including significant discounts for Microsoft Exam vouchers for Azure certifications. Microsoft and partners offer a variety of options for all audiences to develop their skills with Microsoft Azure services. The [Microsoft Learning MOOC Catalog](#), a component of Azure Skills, provide in-depth courses with labs, office hours and tests. After taking a MOOC (massive open online course), IT staff should have the hands-on skills they need to be able to deploy, build and architect solutions on Azure.
- Microsoft Virtual Academy (<https://mva.microsoft.com/product-training/microsoft-azure>) offers training from the people who helped to build Microsoft Azure. From the basic overview to deep technical training, IT staff will learn how to leverage Microsoft Azure for their business.
- Microsoft IT Pro Cloud Essentials (<https://www.itprocloudessentials.com>) is a free annual subscription that includes cloud services, education, and support benefits.
- IT Pro Cloud Essentials provides IT implementers with hands-on experience, targeted educational opportunities, and access to experts in areas that matter most to increase knowledge and create a path to career advancement.
- The Microsoft IT Pro Career Center (<https://www.itprocareercenter.com>) is a free online resource to help map your cloud career path. Learn what industry experts suggest for your cloud role and the skills to get you there.
- Follow a learning curriculum at your own pace to build the skills you need most to stay relevant. In the next section, you will see a list of suggested resources to help onboard your team for training success.

Complete Training

Technical Training

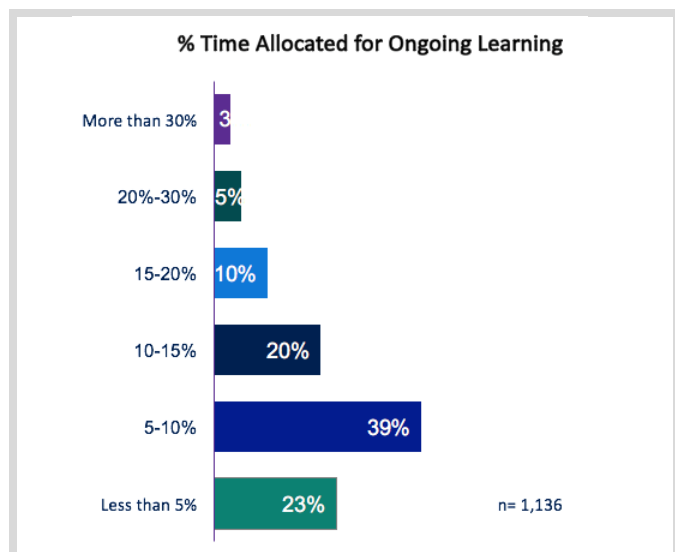
Whether you need to fill a skills gap or are looking to constantly improve your teams skill surface area, technical training is critical to your success.

In our research, we found conferences and paid online training are the most common learning mechanisms.



Source: Microsoft Cloud Practice Development Study, MDC Research, November 2016

Moreover, in this study we found that partners spend a median of 8.5% of technical resource time on training.



Source: Microsoft Cloud Practice Development Study, MDC Research, November 2016

CLOUD PLATFORM UNIVERSITY

[Cloud Platform University Online](#) is an interactive, scenario-based training resource to equip you with the foundational elements of selling and supporting Microsoft cloud and enterprise technologies.

MPN LEARNING PATHS

[Microsoft Partner Network \(MPN\) Learning Paths](#) provide step by step guides displaying training opportunities and certification options, organized by products, competencies, exams/accreditations and business focus.

MICROSOFT INSPIRE CONFERENCE RECORDINGS

Even if you missed the annual live event, the [Microsoft Inspire Conference](#) provides many of its sessions as recordings you can view at anytime—no WPC conference pass required.

PARTNER COMMUNITY EVENTS, CALLS & WEBINARS

The [Microsoft Partner Enablement Blog](#) maintains a schedule of trainings available to partners, visit often and plan your training calendar.

SMART PARTNER MARKETING

Leverage the [Microsoft Smart Partner Marketing](#) site as your starting point for training your marketing resources.

RESOURCES

- [Optimize your operations eBook](#)
- [Successful Cloud Partners](#)
- [Cloud Platform University Online](#)
- [Partner Learning Paths](#)
- [Microsoft Inspire Conference Recordings](#)
- [edX Courses from Microsoft](#)
- [Sales Training Resources](#)
- [Technical Training Resources](#)

Training Options

Resources



RESOURCES

- [Azure Skills](#)
- [Azure Skills Announcement](#)
- [Microsoft Official Curriculum](#)
 - [On-Demand](#)
- [Find a Microsoft Learning Partner](#)
- [Microsoft MOOC Azure Courses](#)
- [Opsgility On-Demand Azure Courses](#)
- [Opsgility Instructor-Led Azure Courses](#)

Finding the Right Training Resource

The C+E Partner Curriculum Guide provides you with sales and technical curriculums for each of the Specialization areas that you may consider focusing on. It describes the Readiness Programs and Engines and resources available to you in order to build your skills around selling, deploying and architecting Cloud Infrastructure and Management, Cloud App Dev, Data Platform and Data Analytics, Security and Mobility solutions.

Whether you're new to Azure or already a cloud professional, training is one of the best investments you can make in your career. [Azure Skills](#) provides a free online training option and great deals on certification, including significant discounts for Microsoft Exam vouchers for Azure certifications.

For the Enterprise Mobility + Security practice consider the following sections in the guide for training for your sales and technical teams:

- Application/Data Access Management
- Mobility Management
- Threat Protection and Prevention

Below are several additional training resources to consider for your organization in addition to the resources in the C+E Partner Curriculum guide.

[Microsoft Learning](#) offers a wide variety of official curriculum on-demand as well as [edX courses that are taught by Microsoft experts](#), let you learn through hands-on experience

with broad reach of Azure technologies.

[Microsoft Learning Partners](#) are available world-wide to help enable your team for Microsoft Azure via live instructor-led training. Instructor-led can be scheduled as a dedicated delivery at your location or virtually using remote learning technologies. Many courses are scheduled as open-enrollment courses which allows you to not have to schedule a dedicated class.

[Microsoft Virtual Academy](#) provides live and on-demand virtual training for your technical team, with new courses arriving weekly. Also, includes access to a comprehensive assortment of e-books from Microsoft Press.

[Pluralsight](#) is a key Microsoft partner offering Azure training. Find more than 40 beginner, intermediate, and advanced training courses on Azure. If you are a Visual Studio subscriber, use your benefits to access Azure training. [70-534 Training](#) - [70-533 Training](#)

[Opsgility](#) is a key Microsoft partner offering Azure training. Find more than 70 online classes focused on Azure with full-learning paths for Azure certification. Opsgility also offers a full set of instructor-led trainings for Azure focused on Architects, Developers, DevOps, Operations, Sales and Decision Makers. [70-534 Training](#) - [70-533 Training](#) - [Real World EMS](#)

[O'Reilly Safari](#) provides subscription access to more than 40,000 books, videos, and interactive tutorials from over 200 of the world's best publishers, including O'Reilly, Pearson, Harvard Business Review, and Packt. They also offer live online training courses led by instructors from O'Reilly's network of tech innovators and expert practitioners.