

<u>AWS re/Start</u> is a full-time, skills development program that prepares learners for careers in the cloud. Through scenario-based learning, and hands-on labs, learners gain the technical skills they need for entry-level cloud roles. AWS re/Start also focuses on building professional skills such as adaptive communication, time management, and collaboration. The program's mission is to build a diverse pipeline of entry-level cloud talent.



# <u>Curriculum</u>

Each cohort of learners, supported by professional mentors and accredited trainers, completes cloud curriculum, which features scenario-based learning, hands-on labs, projects, and coursework. The program helps individuals build technical skills, including programming, and key cloud concepts (computing, storage, networking, security, and databases). In addition to technical skills, AWS re/Start teaches employability skills to help learners succeed in a professional environment.

AWS re/Start cohorts are delivered in-person or in a virtual instructor-led delivery when increased flexibility is required.

#### Learning Objectives

- Working knowledge of the Linux operating system, scripting, automation, and programming languages with focus on Python
- Understanding of networking concepts, protocols, security best practices particularly as related to their cloud deployment
- Knowledge of security fundamentals such as authentication, authorization, AWS' shared responsibility model and firewalls
- Fundamental understanding of databases technologies
- Application of AWS Core Services in the area of compute, storage and networking, including EC2, S3, IAM, VPC, Lambda, Cloud Formation, RDS, and Route 53
- Understanding of professional skills for a technology working environment, including communication skills, collaboration tools, project management, presentation skills, and project reporting

# Day One Competencies:

Individuals graduating from the AWS re/Start program are ready for roles in several areas, including:

- Data Center technician performing configurations directed and designed by others
- Technical support (first line of triage in simple infrastructures and core AWS services)
- Automation of simple tasks through Python scripting, including in an AWS Core services environment
- Basic networking configurations and debugging
- Simple AWS Core Services configurations



# Progression to Advanced Tasks:

Graduates have the foundational skills to progress to work on more advanced tasks after a few months on the job. Below are some examples of tasks graduates can take on after a few months in role:

- Customer support (progressively complex triage scenarios)
- Software Engineering/Junior DevOps, automating tasks of growing complexity
- Supporting cloud deployment (configuration, automation, and debugging)
- Development and/or automation on AWS

# **Ongoing Support for AWS re/Start Graduates**

To help graduates progress to more advanced skills and ease the employment onboarding process, the graduates receive access to additional resources upon their graduation. This material includes whitepapers, hands-on labs, webinars, workshops, and access to study sessions with AWS Subject Matter Experts and Instructors. It is recommended that graduates dedicate one to two hours per day for study during or outside of work to help them progress. These resources allow graduates to further their knowledge in AWS core offerings and advanced concepts, in alignment with specialties such as architecting, and managing and developing AWS solutions.

Best Practices to Onboard AWS re/Start graduates on a team: This is a sample plan, refine as needed.

**Phase 1: Onboard and understand processes and tools:** During this period, the employer is encouraged to provide insight into the company's work culture, policies, and procedures. We recommend a deep dive into areas that are critical to the role. Examples include ticketing tools, proprietary tools, chat interfaces, and exposure to the specific company technology.

**Phase 2: Shadow higher-level cloud employees:** The Phase 2 graduate can shadow a Phase 3 graduate (or a current employee) who is working on low priority production issues. In this phase, the graduate is an observer who takes notes, learns best practices, understands communication protocols, and builds a pathway for growth. The graduate in this stage can start to offload the senior mentor in simple tasks.

**Phase 3: Work on low priority (non-customer impacting issues):** We recommend assigning a Phase 3 graduate non-customer critical issues (of low severity). The issue resolution can be reviewed to ensure technical correctness and minimize potential customer impact. Upon completion of this phase, the issue resolution can be reviewed before the new hire assumes full live production roles.

# **Customer Impact**

"It's a great way of helping to increase diversity and inclusion within the industry it's a chance to get good, enthusiastic engineers into our workforce and it's a great way to give opportunities to people who wouldn't ordinarily come into the industry." **Hiren Joshi, Principal Consultant at Infinity Works** 

"It's become more important to hire and grow junior individuals, because it's actually really difficult to hire really experienced people at small company money." **Jon Topper, CEO and CTO at The Scale Factory** 

"The alumni that we have recruited from the AWS re/Start program are delivering solutions for our clients. They get incredible feedback and they contribute significantly to our organization internally." Michael Fordham, Cloud Consultant at BJSS



# **AWS re/Start Curriculum Details**

#### **Cloud Foundations**

Introduction to Cloud (basic computing and introduction to AWS)	20 hours
Linux Fundamentals	42 hours
Networking Fundamentals	22 hours
Security Fundamentals	33 hours
Python Programming	46 hours
Databases Fundamentals	31 hours

# **AWS Core Services:**

Jumpstart on AWS (JAWS) provides a deeper dive into AWS from an operation perspective. JAWS is covered between Week 8 – Week 11.

Well-Architected Framework	7 hours
Understanding-Systems-Operations-on-AWS	8 hours
Tooling-and-Automation	6 hours
Computing-Servers	10 hours
Computing-Scaling-and-Name-Resolution	13 hours
Computing-Containers-and-Serverless	10 hours
Computing-Database-Services	8 hours
Networking	9 hours
Storage-and-Archiving	16 hours
Monitoring-and-Security	10 hours
Managing-Resource-Consumption	7 hours
Creating-Automated-and-Repeatable-Deployments	16 hours

# Daily and Weekly Recurring sessions:

Room for instructor driven reinforcement sessions is provided through the twelve weeks, in order to validate learners' preparation. Peer to peer sessions are also included to prepare learners to teamwork in a professional environment. The personal portfolio project is an activity targeting the completion of a program final project: the learners will be able to leverage this personal portfolio for skills demonstration during the interview process.

Daily Recap sessions/reinforcement time	40 minutes /day
1/1 activities like mentoring, small presentations, personal portfolio preparation	2 hours/week



# **Employability Skills and Event Sessions:**

The curriculum features sessions and activities blending soft skills learnings with professional environment-like tools, processes and best practice exposure. The sessions are applied to the technical curriculum and to the personal portfolio project to make this a unified and immersive experience for the learners.

Self-Assessment – Who Am I?	1 hour
Amazon Leadership Principles	4 hours
Communication Skills	3 hours
Goal Settings	2 hours
Teamwork and Collaboration	4 hours
Technical Thought Process	3 hours
Digital Presence	2 hours
Personal Portfolio Project* temporarily removed from agenda due to Covid-19 and virtual training	2 hours
Resume preparation	5 hours
Elevator Pitch	1 hour
Networking skills	4 hours
Hiring Process	1 hour
Interview Process	1 hour
Explore Cloud Job Postings	3 hours
Explore Cloud Possibilities	2 hours
Community session: SME visits	1 hours
Community session: Company visit	4 hours
Community session: Alumni visit	2 hours
Community session: Networking event	6 hours
Community session: Mock interviews	6 hours
Graduation Ceremony	4 hours
Certification Exam	4 hours
Program wrap-up	4 hours

# **Cloud Practitioner Essentials Assessments**

During week 12 of the program, learners will have an opportunity to study and prepare for the Cloud Practitioner certification exam. Learners can complete assessments for foundational AWS topics to review AWS core services.

Cloud Practitioner Certification Practice

3 hours