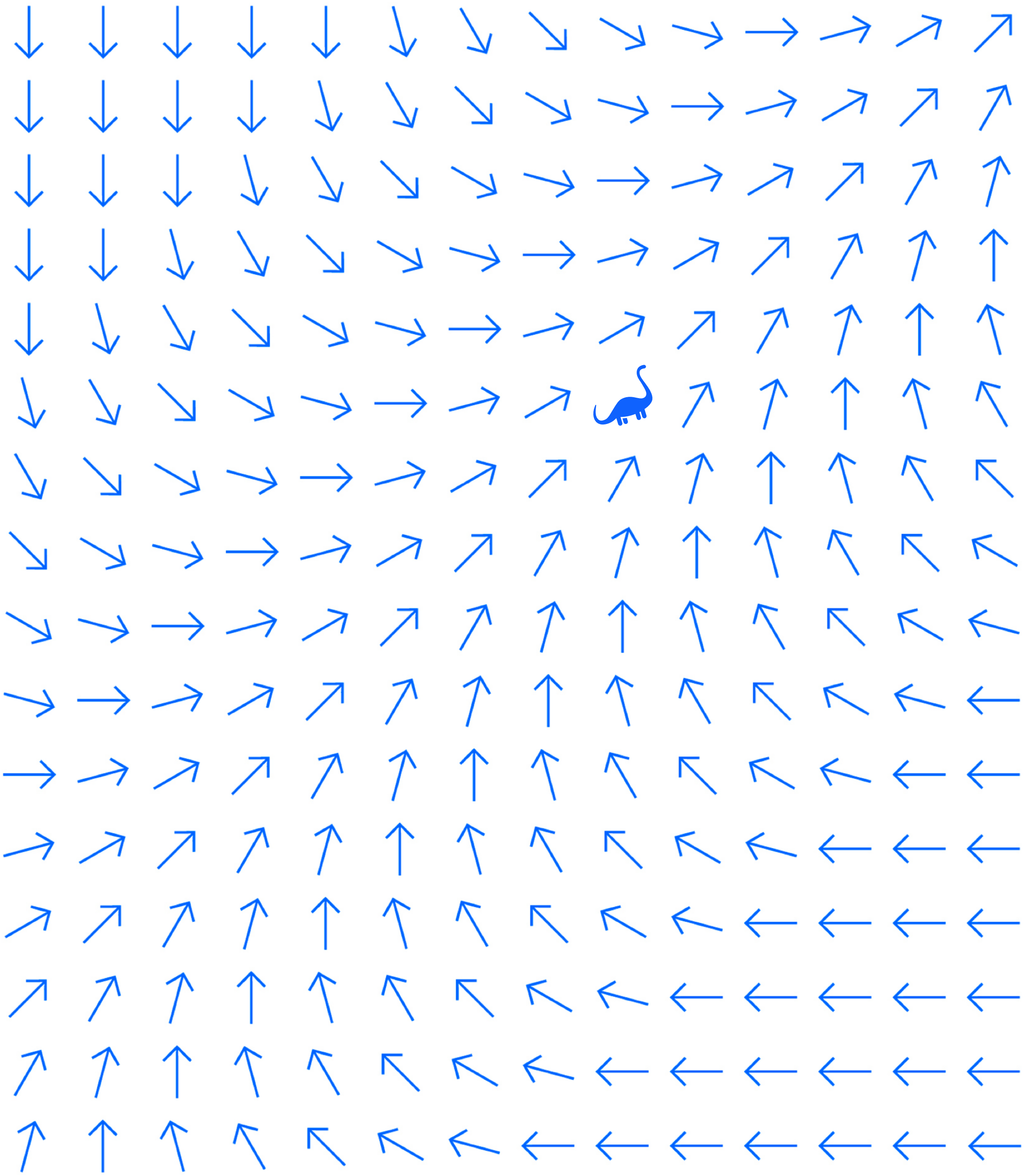


EnergiZ @ IBM DACH



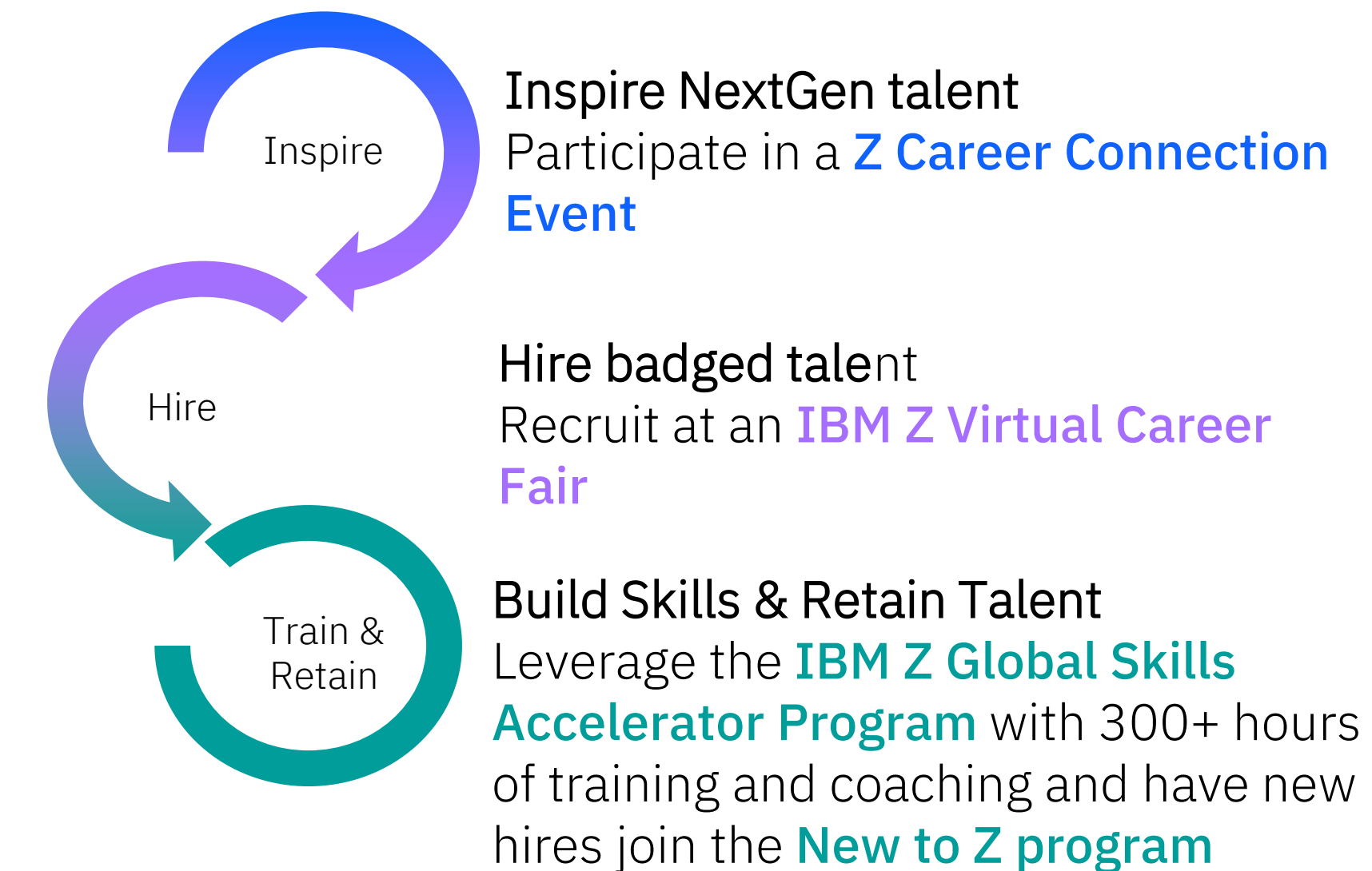
Agenda

- IBM Skills Accelerator Program
- EnergiZ @ IBM DACH

SKILLS: Eliminating the skills gap

Participate in proven programs to meet client talent needs

Build a sustainable workforce



Open Standards and Tooling

- **Get more Agile** with enterprise DevOps on IBM Z with industry standard tools such as Git, Jenkins, Artifactory, Kubernetes, Splunk, etc.
- **Make AI-driven decisions** at scale. With more agile approaches to development, it becomes easier to exploit AI.
- **Automate and standardize IT**, with a consistent approach across the enterprise

Eliminate/Reduce need for specialized IBM Z skills

- **ZOWE** – Open-source framework for mainframe DevOps teams to securely manage, control, script and develop on IBM Z. Provides a modern interface to interact with z/OS, similar to a cloud platform experience
- **IBM Wazi aaS** - Cloud-native development and test for z/OS applications on the IBM Cloud (VPC)
- **Enhance and modernize applications** Broaden capabilities of existing COBOL & PL/I with Java. Develop new applications written in Node.js, Python or Go that interoperate with existing applications

Contact us: zskills@us.ibm.com

Explore more: ibm.biz/ztalent

IBM Training: [Introduction to Z](#)



IBM Z Global Skills Accelerator – Easy Button

Clients Provide Learners

- Employers hire into a Mainframe Systems Administrator (MSA I) or Mainframe Application Developer (App Dev) roles
- Employers provide mentorship and on the job training

Franklin Provides Program Administration

- Franklin Apprenticeships works with client and learners' managers to:

- Map out program details
- Discuss current skill set and course schedule
- Align the program learning plan
- Assign success coaches to learners
- Provides Check-in's and learning support
- Finalizes successful completion of skills program

IBM Z Mainframe System Administrator, Level 1

IBM Z Mainframe Application Developer

IBM Z Mainframe System Administrator, Level 2

Program Details

- Skills program is a set designated list of virtual online courses
- Skills journey is typically 1 year, but can be customized to meet your delivery needs
- Courses have digital badges and certificates to earn throughout the journey
- IBM SME technical office hours provided
- Learner receives Certificate of Completion of program

Benefits

- IBM Subject Matter Experts meet weekly with learners to advise and help with technical questions
- Flexibility to accommodate work and training
- Proven success with over 320 hours of training and dependable content wherever participants are located

The winning formula for building loyal, skilled talent

- Competency based program
- 300+ hours of learning
- Success Coach for participants and managers
- On the Job training
- Technical mentorship



Employer Benefits

- » **Appointed Success Coach**
who will meet weekly with learners to keep them on track and confirm that learners are grasping all concepts
- » **IBM Subject Matter Experts**
who will meet weekly with learners to talk through any technical questions and host content labs
- » **Flexibility**
to accommodate work and training with guided learning
- » **Proven Success**
with over 320 hours of training and dependable content wherever participants are geographically located

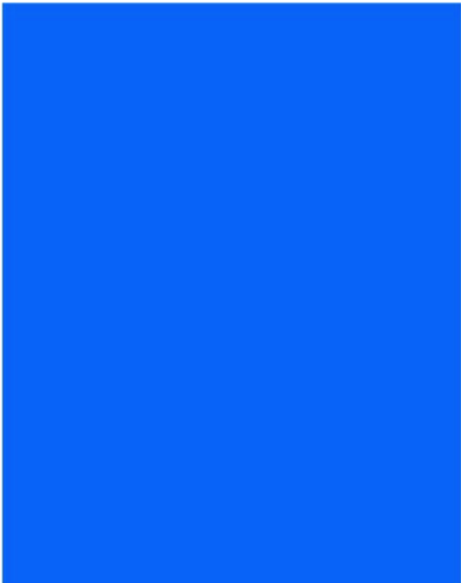
Employer Commitment

- » **Recruit, hire, and onboard**
individuals to participate in the program
- » **Assign**
each learner a technical mentors and provide on the job training for a one-year period
- » **Enable**
learners to attend virtual training sessions with subject matter experts and their success coach



IBM Global Skills Accelerator – Registered Learning Frameworks








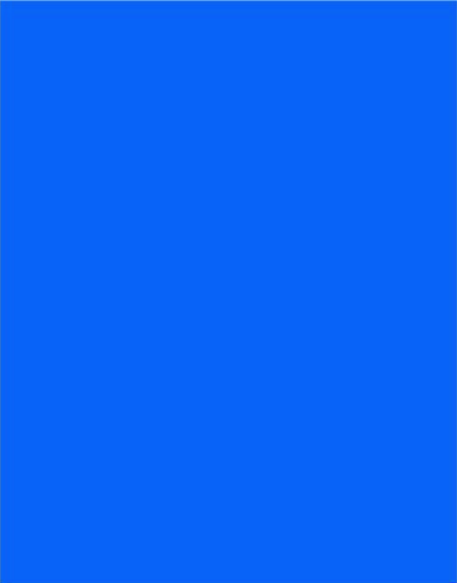
**IBM Z Mainframe
System Administrator
Level 1**

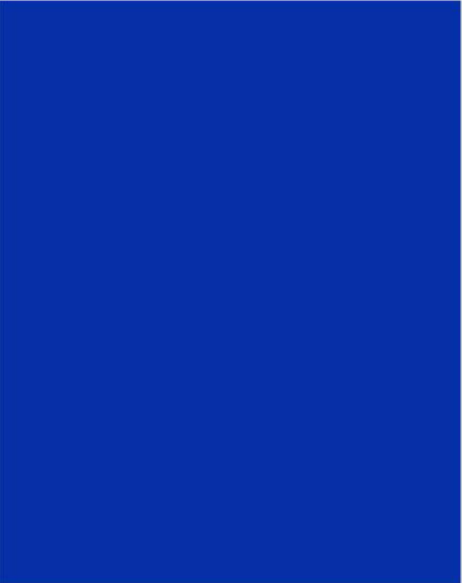
Competency Framework

This document was created by IBM's Apprenticeship Program as an open source standard to help industry accelerate their journey to developing new collar apprenticeship and work-based learning programs.

[Mainframe System Administrator Level 1](#)







**IBM Z Mainframe
Application Developer**

Competency Framework

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[Mainframe Application Developer](#)







**IBM Z Mainframe
System Administrator
Level 2**

Competency Framework

This document was created by IBM's Apprenticeship Program as an open source standard to help industry accelerate their journey to developing new collar apprenticeship and work-based learning programs.

[Mainframe System Administrator Level 2](#)

Detailed Competency Framework – MSA



**Apprenticeship Program
Occupational Standards**

**IBM Z System Mainframe
Administrator
Competency Framework**

O*NET CODE: 15-1142.00 (Network and Computer Systems Administrator)
Updated on 3/1/23

This document was created by IBM's Apprenticeship Program as an open source standard to help industry accelerate their journey to developing new collar apprenticeship and work-based learning programs.

23.0 Demonstrate basic knowledge of HCD	23.1 Identify and discuss the HCD definition process sequence 23.2 Demonstrate how the HCD dialogs are used to define a configuration 23.3 Demonstrate knowledge in how to connect peripheral devices 23.4 Assist with the connection of peripheral devices when possible	<input checked="" type="checkbox"/> O <input checked="" type="checkbox"/> Q&A <input type="checkbox"/> P <input checked="" type="checkbox"/> RA <input type="checkbox"/> S <input checked="" type="checkbox"/> PD <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> MT <input checked="" type="checkbox"/> EW <input type="checkbox"/> RPL	Course: z/OS System Services Structure (ibm.com)
24.0 Demonstrate basic understanding of the use of SMP/E to manage the deployment and lifecycle of mainframe software products	24.1 Use the SMP/E dialogs to install a product and its related service 24.2 Manage exception SYSMOD data 24.3 Use primary and secondary data sets as required by SMP/E 24.4 Analyze output from SMP/E processing and resolve commonly encountered problems 24.5 Use the REPORT command to determine software dependencies between zones 24.6 Use the BUILD MCS process to create a function SYSMOD from an installed product and its service 24.7 Use SMP/E functions to install software service automatically over the internet 24.8 Implement support for communication server FTP client 24.9 Use the RECEIVE ORDER command to order and install z/OS maintenance automatically over the Internet	<input checked="" type="checkbox"/> O <input checked="" type="checkbox"/> Q&A <input type="checkbox"/> P <input checked="" type="checkbox"/> RA <input type="checkbox"/> S <input checked="" type="checkbox"/> PD <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> MT <input checked="" type="checkbox"/> EW <input type="checkbox"/> RPL	Badges: SMP/E for z/OS Workshop - IBM Training - Global
25.0 Demonstrate basic understanding of how to Perform and upgrade a major product in a production	Demonstrate basic knowledge of: 25.1 Implementation plans 25.2 Risk assessments 25.3 Back out plans 25.4 Test plans 25.5 Change management processes to execute the implementation plan	<input type="checkbox"/> O <input checked="" type="checkbox"/> Q&A <input type="checkbox"/> P <input type="checkbox"/> RA <input type="checkbox"/> S <input checked="" type="checkbox"/> PD <input type="checkbox"/> A <input checked="" type="checkbox"/> MT <input checked="" type="checkbox"/> EW <input type="checkbox"/> RPL	Badges: SMP/E for z/OS Workshop - IBM Training - Global

Detailed Competency Framework – App Dev



**Apprenticeship Program
Occupational Standards**

**Application Developer on
IBM zSystems
Competency Framework**

O*NET CODE: 15-1132.00 (Software Developers, Application)
Updated on 03/11/2022

This document was created by IBM's Apprenticeship Program as an open source standard to help industry accelerate their journey to developing new collar apprenticeship and work-based learning programs.

			Building Applications with React and Flux
15.0 Understand how to use version control for all elements of the software delivery lifecycle	15.1 Describe the principles of version control 15.2 Describe versioning, releases, issues, and merges in source code 15.3 Demonstrate proper usage of versioning, releases, issues, and merges in source code 15.4 Understand the use of dependencies and libraries from within and outside the team 15.5 Demonstrate usage of dependencies and libraries from within and outside the team	<input checked="" type="checkbox"/> O <input checked="" type="checkbox"/> Q&A <input checked="" type="checkbox"/> P <input type="checkbox"/> RA <input type="checkbox"/> S <input type="checkbox"/> PD <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> MT <input type="checkbox"/> EW <input checked="" type="checkbox"/> RPL	OJT
16.0 Understand and demonstrate how to construct and test quality code, at scale	16.1 Understand how to construct quality code at scale 16.2 Understand the techniques used for ensuring quality 16.3 Understand the different types of testing, where to apply them, and the relative amounts 16.4 Understand the successful use of test coverage tools 16.5 Understand successful use of performance testing 16.6 Understand successful use of boundary and limit testing Understand successful use of chaotic testing	<input checked="" type="checkbox"/> O <input checked="" type="checkbox"/> Q&A <input checked="" type="checkbox"/> P <input type="checkbox"/> RA <input checked="" type="checkbox"/> S <input type="checkbox"/> PD <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> MT <input type="checkbox"/> EW <input checked="" type="checkbox"/> RPL	OJT
17.0 Understand and demonstrate continuous integration	17.1 Articulate the value of continuous integration in a development environment - Course 1 Continuous Integration and Continuous Delivery – The Big Picture, Module 3 17.2 Demonstrate CI principles through frequent commits to trunk of codebase - Course 1 Continuous Integration and Continuous Delivery – The Big Picture, Module 3 & 5 17.3 Demonstrate CI principles through use of automated tests to ensure codebase is in a good state - Course 1 Continuous Integration and Continuous Delivery – The Big Picture, Module 3 & 5 17.4 Demonstrate proficient use of continuous integration tools - Course 2 Getting Started with Jenkins 2 and Course 3 Travis CI 17.5 Demonstrate understanding of the impact of commit defects into shared codebase - Course 1 Continuous Integration and Continuous Delivery – The Big Picture, Module 4	<input checked="" type="checkbox"/> O <input checked="" type="checkbox"/> Q&A <input checked="" type="checkbox"/> P <input type="checkbox"/> RA <input type="checkbox"/> S <input type="checkbox"/> PD <input type="checkbox"/> A <input checked="" type="checkbox"/> MT <input type="checkbox"/> EW <input checked="" type="checkbox"/> RPL	Continuous Integration and Continuous Delivery – The Big Picture Getting Started with Jenkins 2 Travis CI
18.0 Understand and demonstrate continuous delivery	18.1 Articulate the value of continuous delivery in a development environment - Course 1 Continuous Integration and Continuous Delivery – The Big Picture, Module 4	<input checked="" type="checkbox"/> O <input checked="" type="checkbox"/> Q&A <input checked="" type="checkbox"/> P <input type="checkbox"/> RA	Continuous Integration and Continuous

Common Foundational

Learning Content

- Introduction to Computer Science (10h)
- IBM Z Xplore (32h)
 - Fundamentals
 - Concepts
 - Advanced
- z/OS Practitioner Certification Course (50h)
 - Intro to IBM z/OS
 - Intro to z/OS Commands and Panels
 - Systems Programming on IBM Z

Mainframe System Admin (MSA I)

Mainframe System Administrator I

Learning Content

- Professional Development Courses
- Networking Principles
- z/OS REXX Programming
- z/OS System Services Structure
- SMP/E for z/OS Workshop
- Db2 Fundamentals
- CICS & IMS: IBM CICS Video Course Series
- CICS TS: Controlling CICS Transaction Server Operations 5.6
- CICS TS: Concepts and Operation Assessment 5.6
- IMS Fundamentals
- z/OS Introduction: An IBM Redbooks video course
- z/OS JCL: Introduction to z/OS JCL
- JCL Lecture
- TSO / ISPF / SDSF Lecture

Mainframe System Admin (MSA II)

[Mainframe System Administrator II](#)

Learning Content

- Professional Development Courses
- IBM Z Hardware Management Console Operations
- IMS Fundamentals/Diagnostics
- IBM Z System Automation Curriculum
- IBM Mainframe Specialist z/OS Expert 2.5
- Db2 - Database Management System Series
- Zowe Fundamentals
- Z Performance - Introduction to Mainframe Performance

Application Developer (App Dev)

Mainframe Application Developer

Learning Content

- Big Data and Analytics: Hands On
 - Big Data 101
 - Hadoop 101
 - Spark Fundamentals
- Web Development Fundamentals
- Front-End Web Development Quick Start w/HTML5, CSS, JavaScript
 - Intro to Web Development
 - iQuery Fundamentals
 - Angular: Getting started
 - Designing RESTful Web APIs
 - A Practical Start with React
 - Building Application w/React and Flux
- Clean Coding, Social Coding Behaviors and Practices
 - Manage Technical Debt
 - Clean Code: Writing Code for Humans
 - GitHub Fundamentals
 - Understanding and Eliminating Technical Debt
- Introductions to Functional and Imperative Languages
 - JavaScript Fundamentals Vol 1,2,3 & JavaScript
 - Development Environment
 - Node.js
 - Python
 - Java Fundamentals, Core Platform & Fundamental
- COBOL Programming: COBOL Programming with VSCode
- Test Driven Development: Big Picture
- Continuous Integration and Delivery Practices: Big Picture/Getting started with Jenkins 2
- Feature Decoupling – Feature Toggles
- DevOps tools: Chef, Travis, Ansible, Jenkins – DevOps Big Picture
 - DevOps Big Picture
 - Implementing DevOps in the real world
 - Travis CI Tutorial
- Cloud Computing Fundamentals (37TSO / ISPF / SDSFh)
 - IBM Cloud Essentials
 - IBM Cloud Application Development V3
 - IBM Cloudant
 - Docker Containers – Big Picture
 - Container & Kubernetes Essentials
 - Introduction to OpenStack
 - Get started with Microservices ISTIIo
 - Beyond basics ISTIIo
- Enterprise solutions
 - Db2 Fundamentals
 - Managing Db2 Operations
 - IBM CICS Video Course series
 - Modernize Applications w/IBM CICS
 - IMS Fundamentals

IBM Z Xplore Learning Platform

Host a Mini code-a-thon to experience modern ways of working with the mainframe



The IBM Z Xplore mini code-a-thon is a one-day event with hands-on, self-paced challenges designed to experience modern ways of working on a mainframe.

Use today's common developer tools to create modern interfaces with current computer languages. Participant will create a web interface to a z/OS application and utilize data from IoT devices.

The code-a-thon has multiple challenges that progressively build on the concepts and code of previous challenges and a leadership board to showcase progress.

No prior experience required.

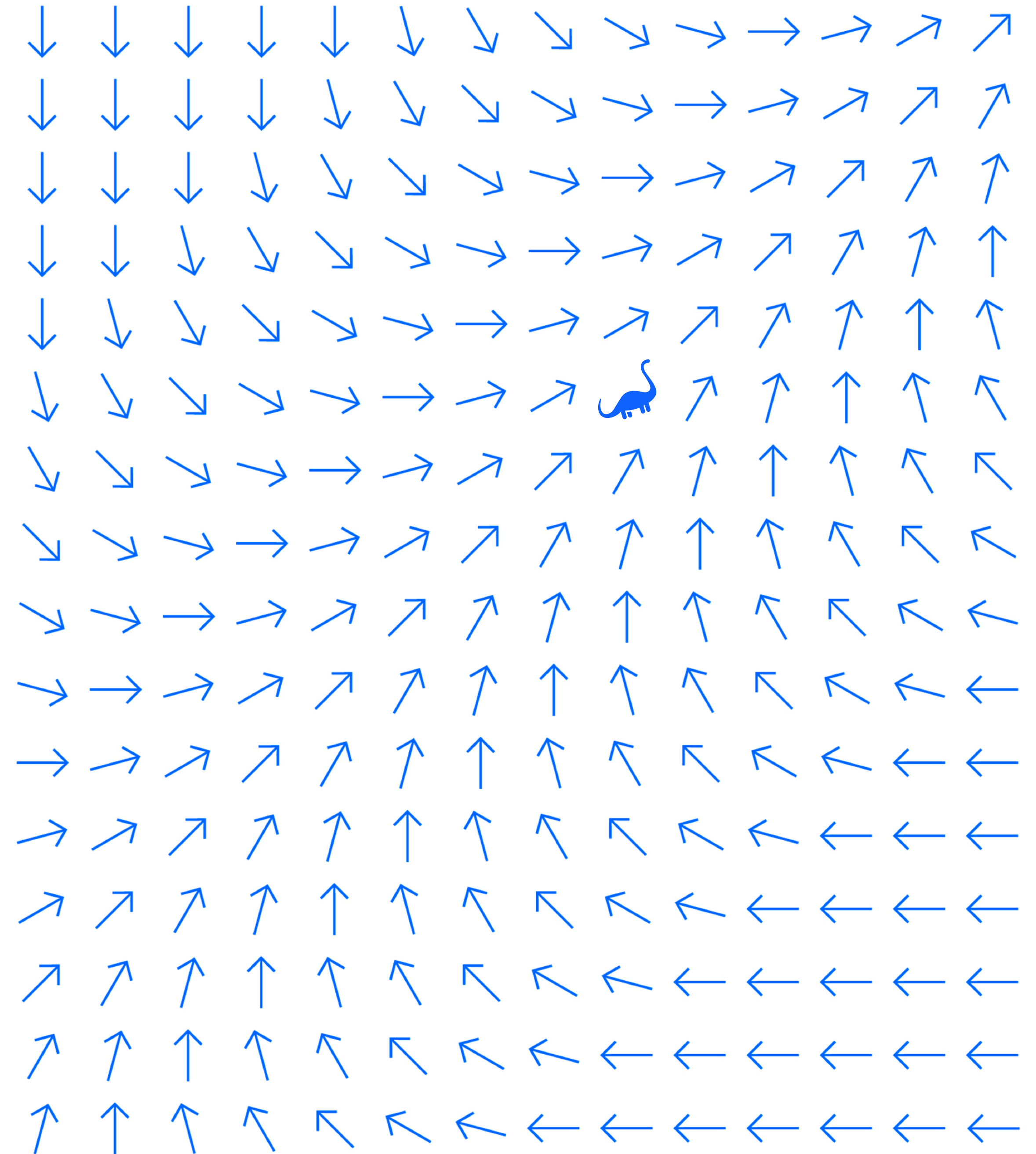
[IBM Z Xplore Overview Kit
Information Page](#)

Additional Education – Training and Communities Available

Title		Description	Link
Getting started with IBM Z		Hands-on resources to get an understanding of IBM Z concepts and technologies. Includes IBM Redbook video courses – z/OS Introduction, CICS, IMS, Cobol	developer.ibm.com/components/ibmz
Learning Collections	Introduction to IBM Z		ibm.biz/zpath-introduction
		Application Modernization with IBM z/OS	ibm.biz/zpath-modernization
		Architecting Applications with IBM Z	ibm.biz/zpath-architecting
		IBM Z System Administrator	ibm.biz/zpath-administrator
		DevOps Transformations for IBM Z and CICD pipelines with DBB Git	ibm.biz/zsystemsDevOps
IBM Z Xplore		Mobile gaming app, interactive learning experience, IBM Z system access, student contest – build skills and earn badges	ibm.biz/ibmz-xplore
z/OS Mainframe Practitioner Certificate		Develop foundational skills in IBM Z hardware and software	ibm.biz/course-zosintroduction
IBM Training		(fee & no cost) Mainframe training, articles, badges, certificates and Learning Journeys	ibm.com/training/search?query=Mainframe
Open Mainframe Project		Cobol & Zowe classes	openmainframeproject.org/projects
Other opportunities to learn and take advantage			
Communities		New to IBM Z: For professionals new or up to 10-years experience on the mainframe	ibm.biz/newtoibmz
		Student Hub: For students wanting to explore careers in enterprise computing & prepare for the future of work	ibm.biz/ibmzstudenthub
		Educator Hub: One-stop destination for IBM Z educators to find the latest communications, news and events, as well as collaborate and network	ibm.biz/ibmzeducatorhub
IBM Skills Build Downloads (educators and students only)		Access to select IBM resources through a free self-service program that will provide students with the skills to differentiate themselves in their career.	ibm.biz/z-academic
IBM Z Trial Softwares		Try the latest IBM® Z® software today at no charge, and with no installation required.	ibm.biz/ibmztrial

EnergiZ @ IBM DACH

Wer, Wie, Was?!



Übersicht IBM Z Ausbildungs- möglichkeiten in DACH

IBM Global Training Partner

[https://www.ibm.com/training/
partners](https://www.ibm.com/training/partners)



European Mainframe Academy

[https://mainframe-
academy.de/](https://mainframe-
academy.de/)



vICTory

<https://victory-eu.eu/de/>



IBM Skills Accelerator Program

[https://www.franklinapprentice
ships.com/](https://www.franklinapprentice
ships.com/)

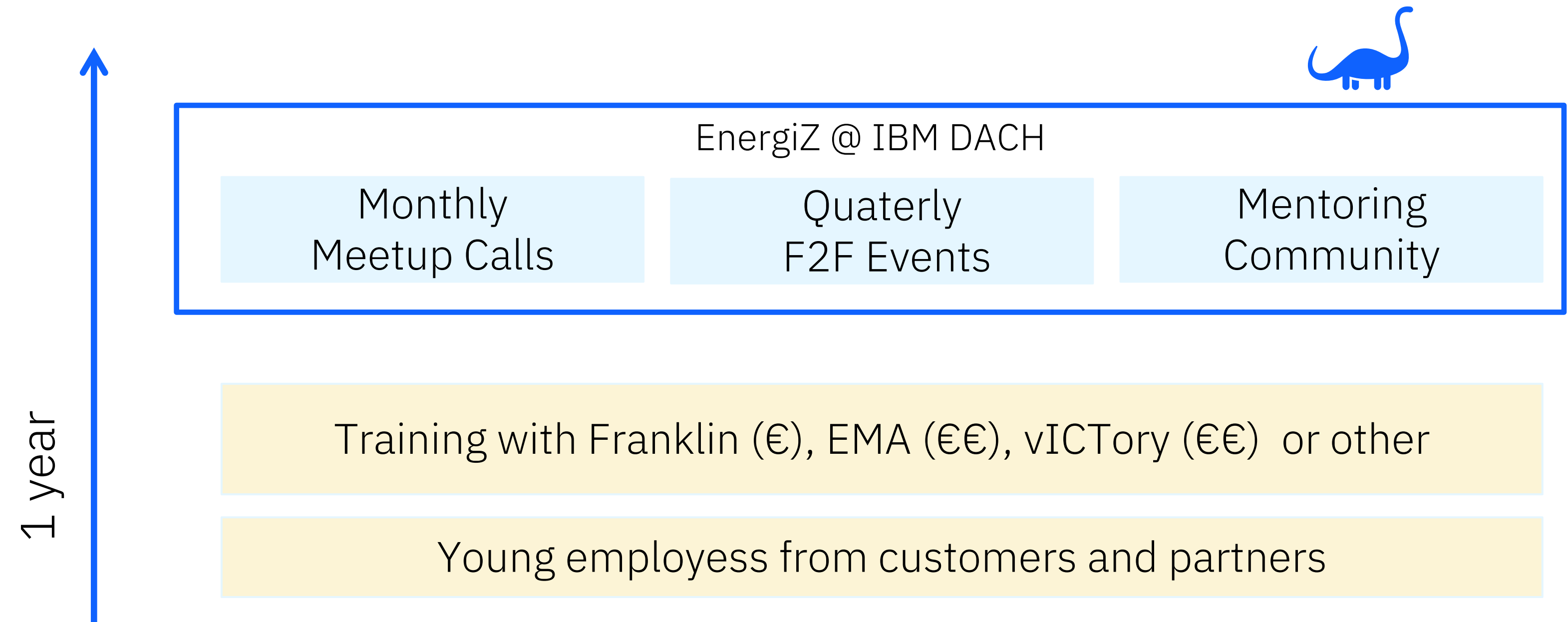


weitere ...

EnergiZ @ IBM DACH

Team:

Maike Havemann
Steffen Janssen
Tobias Leicher
Tanja Lörwald-Schulz
André Spahni
Rüdiger Stumm
Katja Schneider



Die Basis des Programms ist eine fachliche Ausbildung:

- Online Learning über IBM Global Skills Accelerator Programm mit Franklin Apprenticeships in Englisch oder
- Lokales Learning mit der European Mainframe Academy (EMA) in Deutsch oder vICTory oder
- Eine Ausbildung bei einem anderen Schulungsanbieter

EnergiZ @ IBM DACH

Inhalte des Programms:

- Monatliche Community Calls mit fachlichen Schwerpunkten und der Möglichkeit zum Austausch
- Vierteljährlich, zweitägige persönlichen Treffen in wechselnden IBM Lokationen in Deutschland
 - Austauschrunde zum aktuellen Status bei allen Beteiligten
 - Erfahrungsberichte aus dem letzten Quartal
 - Gemeinsame Abendveranstaltung
 - Hands-On Labs und Workshops sowie Einbindung in die IBM Entwicklung des Mainframes

Anmeldung:

- Anmeldeschluss: 31.12.2023
- Email: katja.schneider@de.ibm.com
- Mindestteilnehmerzahl: 10

Start: 6.-7. Februar 2024, IBM Frankfurt

WICHTIG: Die Anmeldung zum EnergiZ @ IBM DACH Programm ist unabhängig von der Anmeldung zum Global Skills Accelerator Programm

Agenda

6. Februar 2024

- | | |
|-----------|---|
| 11.00 Uhr | Begrüßung
Vorstellung der Teilnehmer
Erfahrungsaustausch |
| 13.00 Uhr | Mittagessen |
| 14.30 Uhr | Fachthema
„Wie erreichen wir Hochverfügbarkeit
bei der IBM Z“
Marco Krämer, Martin Recktenwald,
IBM Labor Böblingen

Networking |
| 17.00 Uhr | Ende |
| 18.30 Uhr | Gemeinsamer Abend |

7. Februar 2024

- | | |
|-----------|---|
| 09.00 Uhr | Start
Abstimmung Themen für die
nächsten Treffen, Jahresplanung |
| 11.30 Uhr | Fachthema
„Typische Mainframe Umgebungen –
von Monosystemen über Sysplex bis hin zu GDPS“
Michael Grossmann, SVA |
| 13.00 Uhr | Mittagessen |
| 14.30 Uhr | Feedback |
| 15.00 Uhr | Ende |