

# z/OS Introduction and Modernization

Modernization and DevOps



# Unit Objectives

After completing this unit, you should be able to:

- Describe Modernization
- Describe DevOps

# An increasingly diverse technology environment

Technology diversity provides an increasingly number choices.

While technology diversity results in innovative services and competitive advantages, the cost can be increased infrastructure complexity.

New and existing services must be convenient, stable, and reliable for the customers.

Developing new services and maintaining existing services are more critical than at any time in the past even with the infrastructure complexity introduced by rapidly advancing technology diversity.

# Modernization

Leveraging of technology to meet expanding business goals by aligning IT and business units to compete in today's digital economy.

## Strategic Modernization

- Deliver modern business process platforms that improve the ability to respond to changing user needs rapidly and at manageable cost.
- IT modernization needs to improve customer experience.

## Tactical Modernization

- An organizational culture changes such as adoption of Design Thinking, Agile principals, and an Agile process such as Scrum.

## Operational Modernization

- Changes to the IT infrastructure and application development that needs to adopt to technology diversity and rapidly changing user needs.

# DevOps

- 2009 by Patrick Debois
- Combining “development” and “operations”
- DevOps isn’t a process or a technology or a standard
- DevOps as a “culture” or movement
- “DevOps environment” is an IT organization that has adopted a DevOps culture

# DevOps

Integrating everyone associated with

- Software development and deployment
- Business users
- Developers
- Engineers
- Security engineers
- System administrators

Objective

- Highly automated work flow with a shared focus
- Rapid delivery of high-quality software

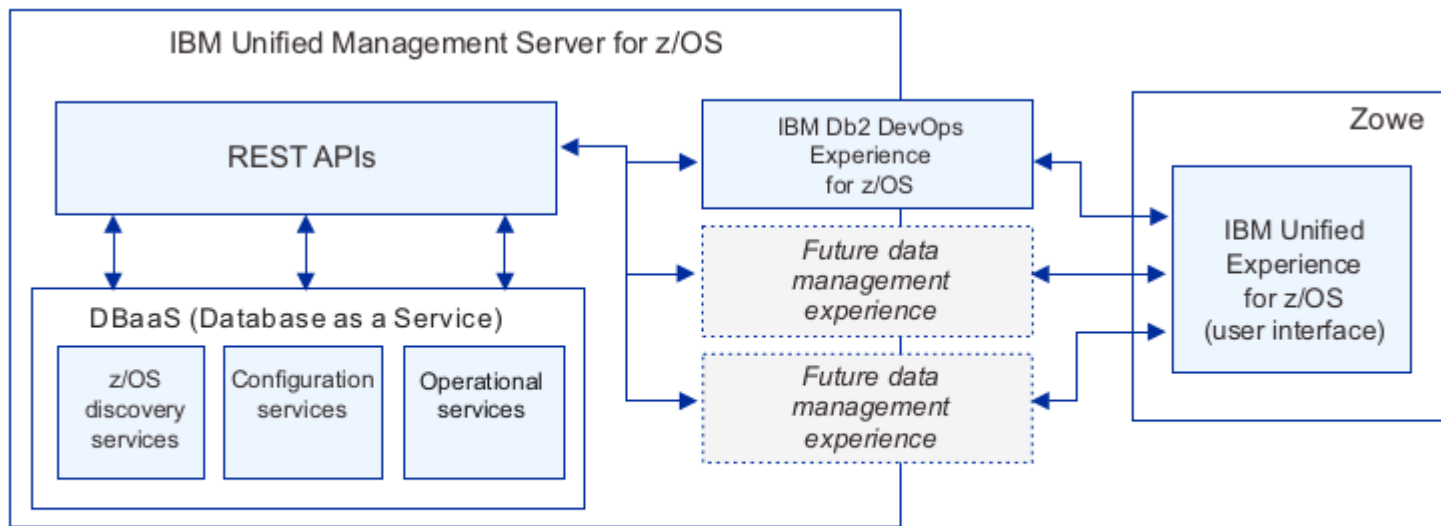


Figure 1. Relationship among IBM Unified Management Server for z/OS, data management experiences, and IBM Unified Experience for z/OS

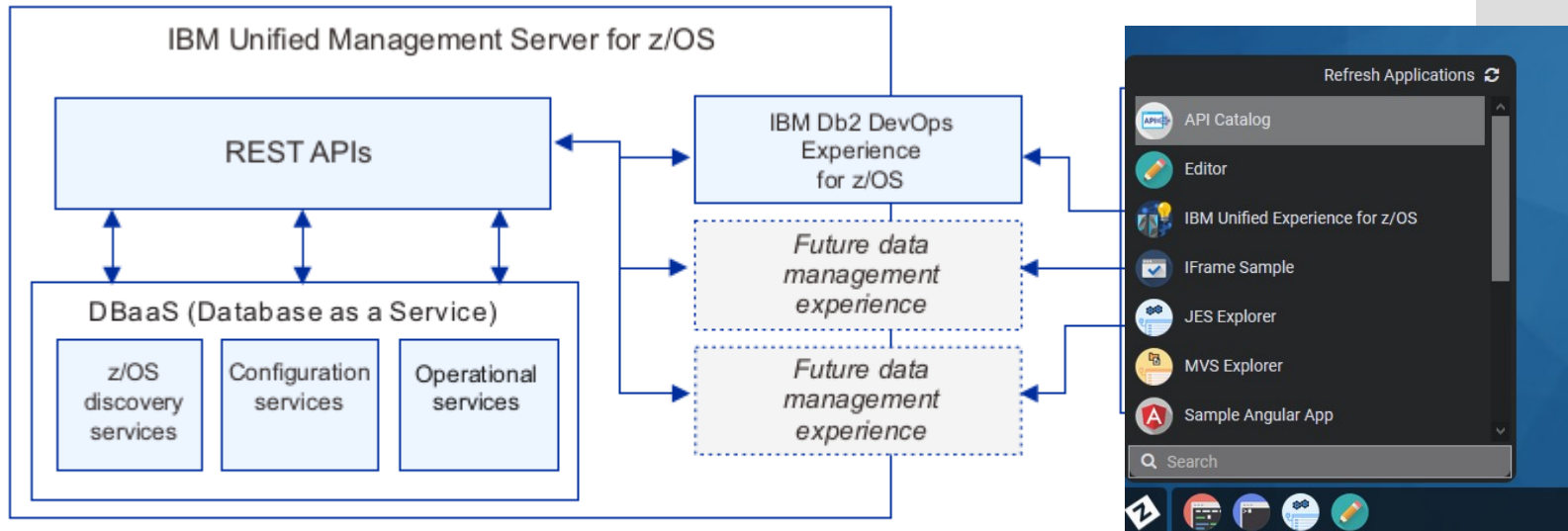


Figure 1. Relationship among IBM Unified Management Server for z/OS, data management experiences, and IBM Unified Experience for z/OS



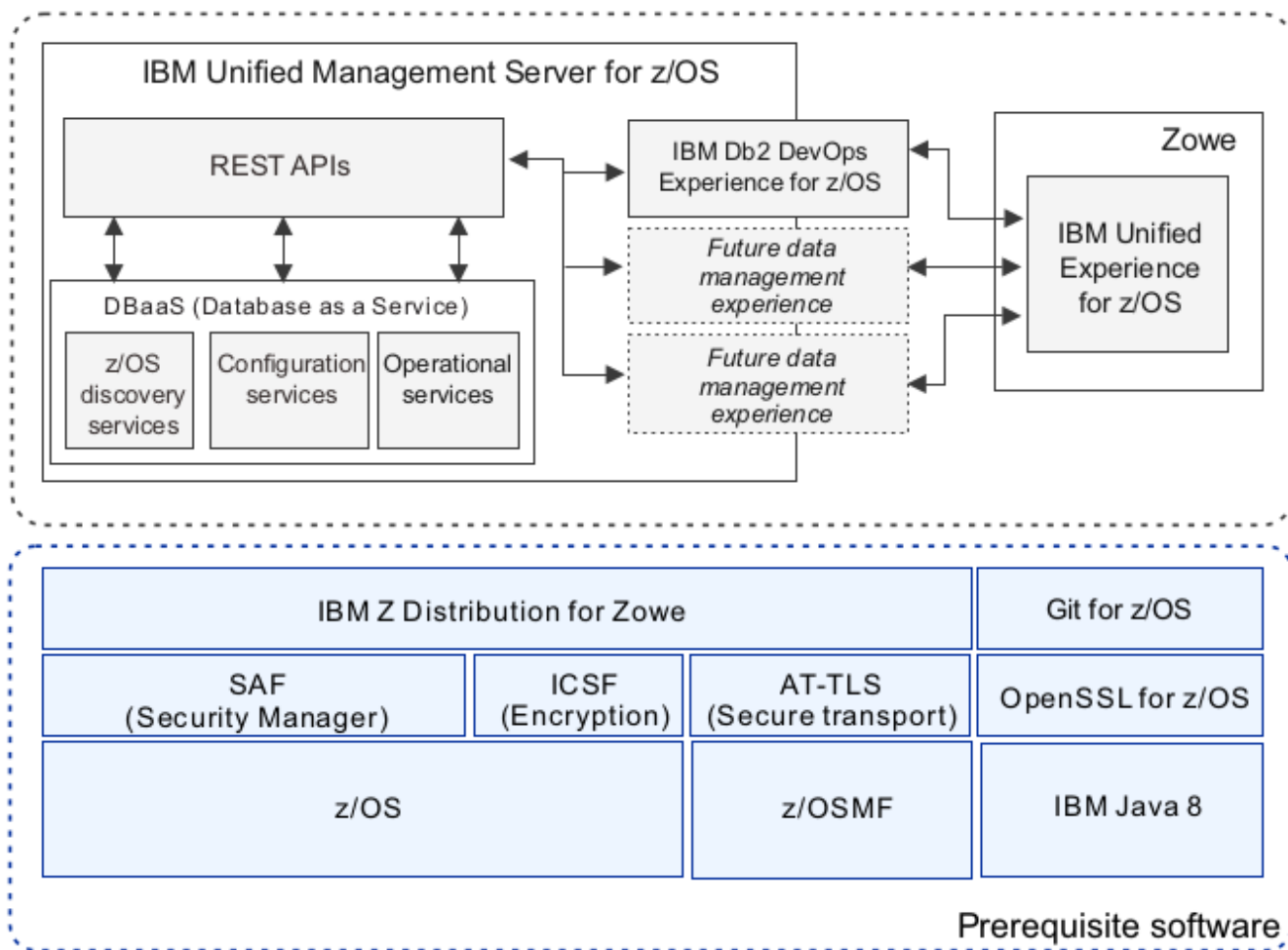


Figure 2. Unified Management Server and prerequisite software

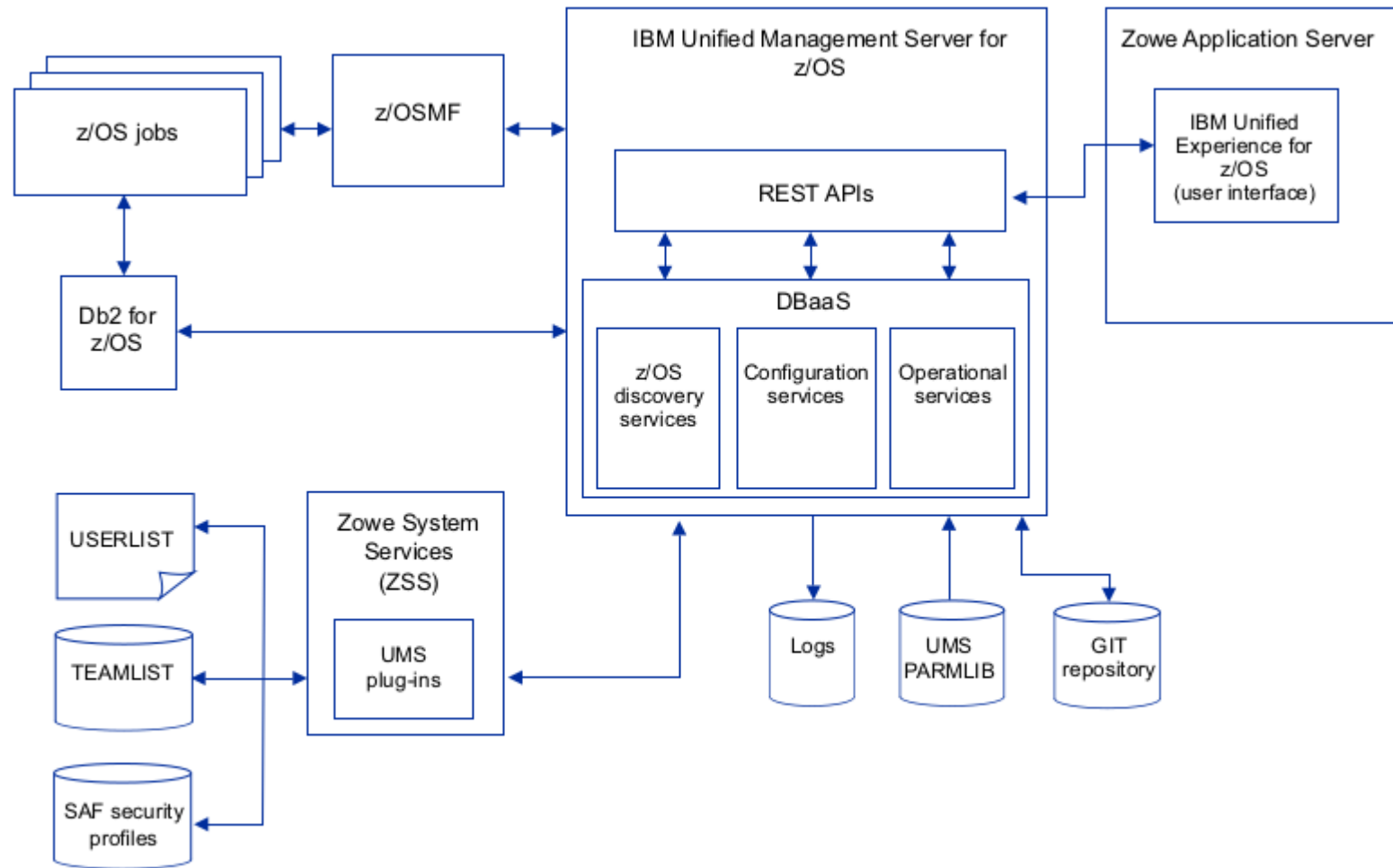


Figure 3. Relationships among UMS and different z/OS resources

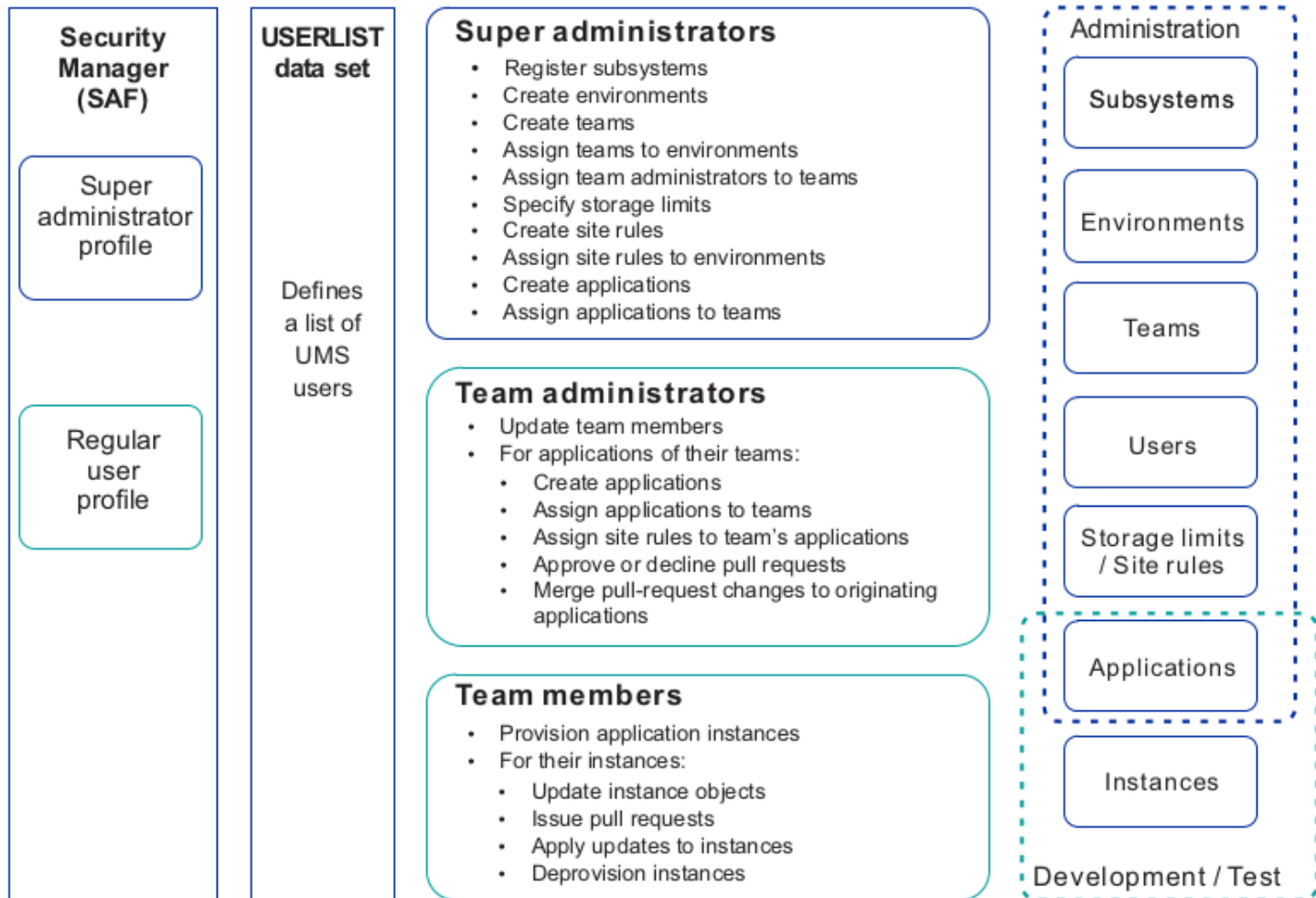


Figure 5. User roles and major responsibilities

### 1. Set up subsystems, environments, and teams



### 2. Register applications and create site rules



### 3. Provision application instances and manage object changes

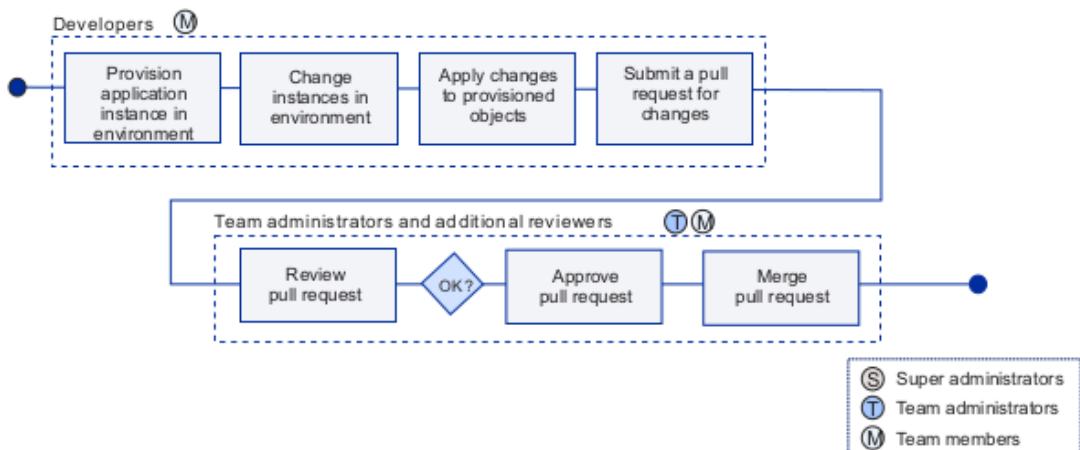


Figure 6. General workflow of the tasks and activities of users and administrators in Db2 DevOps Experience

# IBM Application Moderization & DevOps Suite of Products

<b>z/OS Product Name</b>	<b>Component</b>
Db2 DevOps Experience 1.02.0 (DOE)	5698-DEX
Unified Management Server 1.01.0 (UMS)	5698-UM1
Z Distribution for Zowe 1.20.1	5698-ZWE
Application Delivery Foundation for z/OS 3.03.3 (ADFz)	5655-AC6
z/OS Explorer Extensions	5724-T0723
Explorer for z/OS	5655-EXP23
File Manager Base	5655-Q4900
File Manager Db2	5655-Q4900
File Manager IMS	5655-Q4900
File Manager CICS	5655-Q4900
ADFzCC -- Base	5655-IPV00
z/OS Source Code Analysis	5724-T0733
Application Performance Analyzer	5655-Q4900
z/OS Debugger Base	5724-T0713
Dependency Based Build (DBB)	DBBZOS000
Rocket Git for z/OS	5737-I2201
Z Open Automation Utilities (ZOAU)	5724-T0753
z/OS Dynamic Test Runner	5724-T0763
RSE API	5655-EXP33
Fault Analyzer for z/OS	5655-Q1100
Developer for System Z (IDz)	

# Sources of Information

IBM Unified Management Server for z/OS  
User Guide [SC27-9151](#)

IBM Unified Experience for z/OS  
interface for  
IBM Db2 DevOps Experience for z/OS

IBM Db2 DevOps Experience for z/OS  
Administrator's Guide [SC27-9138-00](#)

# Unit summary

Having completed this unit, you should be able to:

- Describe Modernization
- Describe DevOps

