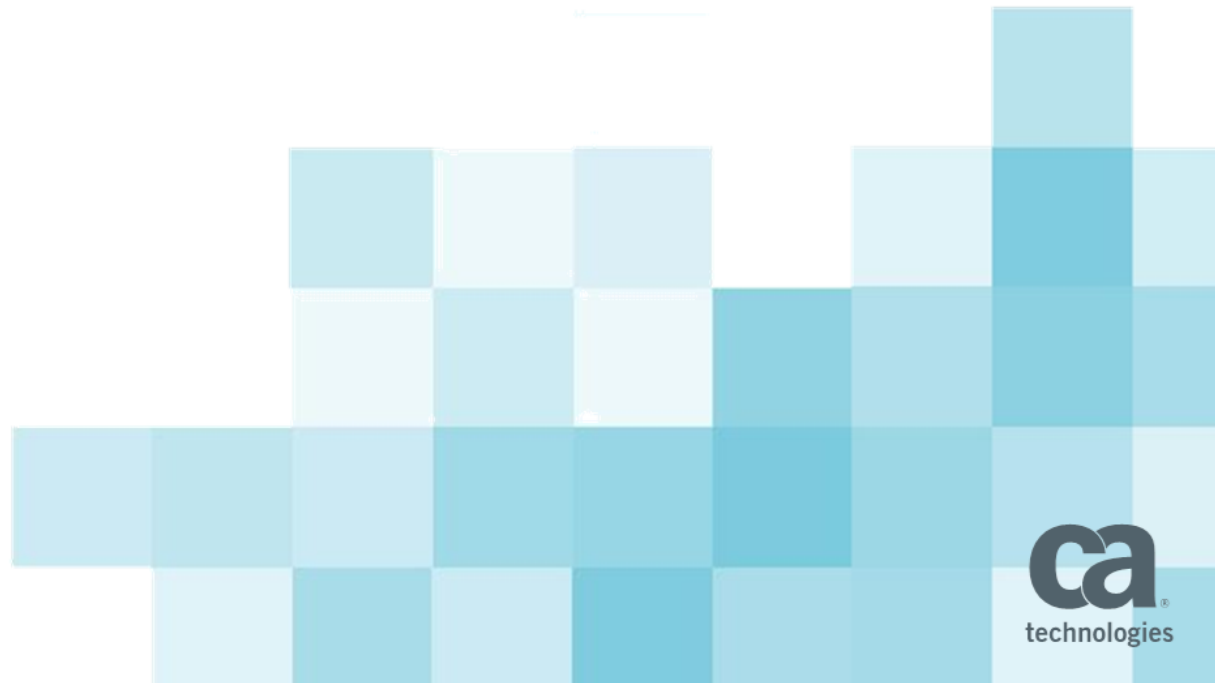# Application Development Business Line Overview

Michael Maggio, VP Product Management and Strategy
Business Line Leader
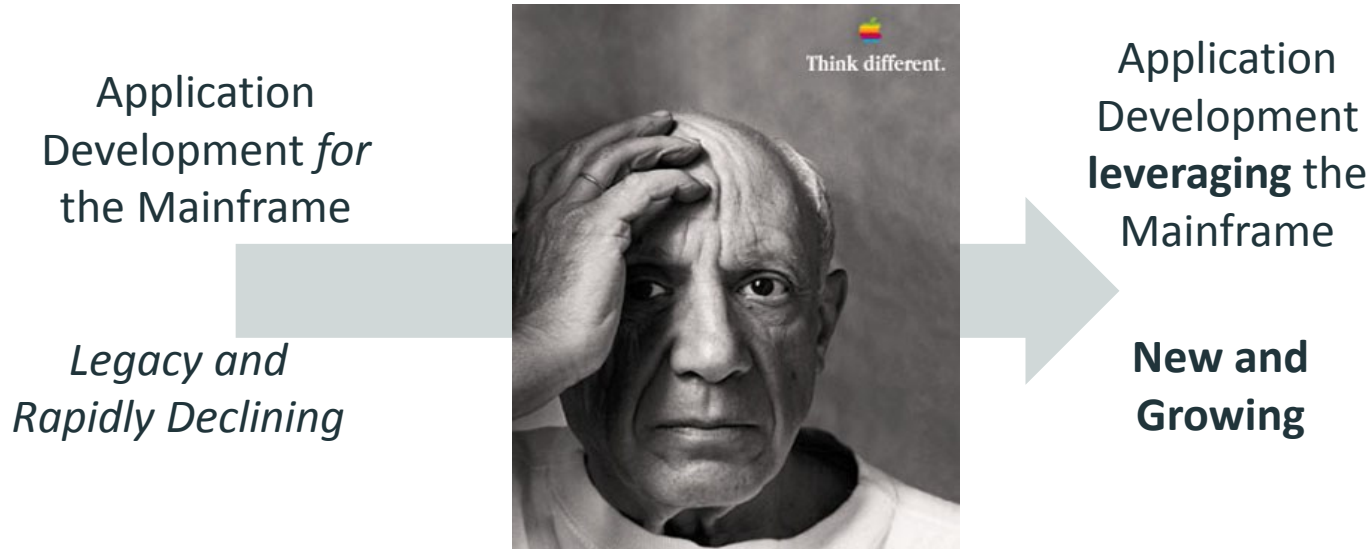
September 2014

Hello, My Name Is...

- **Over 25 years building startups from the ground floor:**

  - **Segue Software**, Automated Testing Company
    - Original VP of Engineering
    - Grew company from 3 to 300 people over 7 years
    - Multiple rolls: VP Development, VP BD, SVP Marketing, GM
    - IPO

  - **NetMorf**: One of the first mobile application companies
    - Founding CEO
    - Grew company from 3 to 80 employees in 18 months
    - Customers included BN.com, Fidelity, Pivotal Software
    - Victim of the Dot-Com crash

  - **Newbury Networks**: First WiFi based indoor-location company
    - Recruited in as CEO
    - Delivered multiple solutions based on technology: Hospitality, Security, Healthcare
    - Established OEM eco-system with largest WLAN players
    - Sold to one of our OEM's – creating a 5X revenue multiple in year 1 ($10M - $50M)

Way Too Early???

Never Too Late!!!

- **Up Next:** Building a growth organization with the Application Development Portfolio of one of the largest ISV's in the world!

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Application Development in a Mainframe World

Application Development *for* the Mainframe

Legacy and Rapidly Declining

Think different.

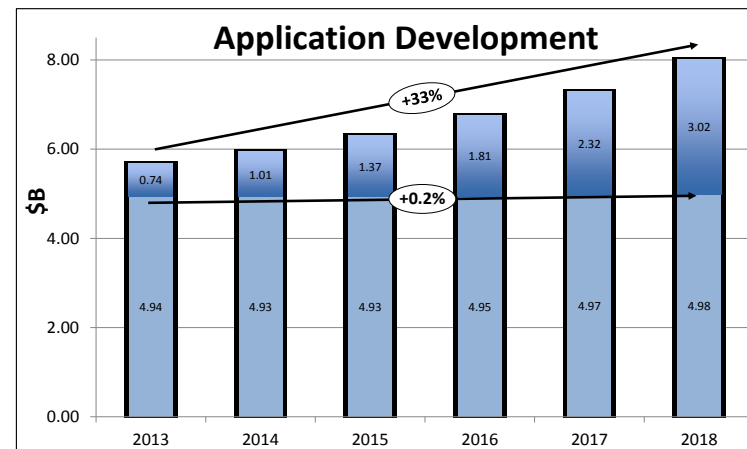Application Development **leveraging** the Mainframe

New and Growing

- Business Line Strategy:

  - **Update** our **existing products** to address the **ENTIRE** dynamic datacenter

    - Complete the suite and expand access from Mobile to Mainframe

  - **Balance** investments between existing and **new technology**

    - New solutions leverage our customer existing investment in CA Products

  - **Expand** our offerings to integrate existing **CA & 3rd Party products**

    - Provide a platform to integrate best-of-breed solutions adopted by our customers

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MF CSU: A Growth Business – The Dynamic Data Center

- **The NEW Market for MF Application Development:**

  - Enterprises are differentiating themselves by providing services closer to the customer via **mobile and web apps**

    - These same enterprises utilize the **Mainframe** as the "*System of Record*" at the heart of the Dynamic Data Center

  - *Application developers* are rapidly building *new* mobile and web applications that *access* Mainframe systems, their associated databases and application logic

    - The integration of agile-based **mobile app development** dependent on mission-critical **mainframe-based operations** is driving the importance of **DevOps initiatives** within the application development organizations

Application Development

Year	Lower	Upper
2013	4.94	0.74
2014	4.93	1.01
2015	4.93	1.37
2016	4.95	1.81
2017	4.97	2.32
2018	4.98	3.02

+33%

+0.2%

$B

Source: IDC & CA Research

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The High Cost of Application Development

Application development and maintenance takes up 34% of IT budgets:

- **Rising cost of labor**, both in-house and off-shore development

- Dramatically increasing number and **complexity of applications**

- Competitive need for **rapid delivery** and updates to applications

*Source: Gartner Research

Recent leading analyst survey shows:

- **Over half** of customer-facing and business-critical applications are **dependent on the mainframe**.

- **70%** of CIOs believe application developers are unaware of how their **code impacts the mainframe.**

- **Poorly optimized** application interacting with the mainframe **drive up MIPS costs unnecessarily.**

- **Drastic costs reductions** occur if developers have visibility on how their **code affects the mainframe**.
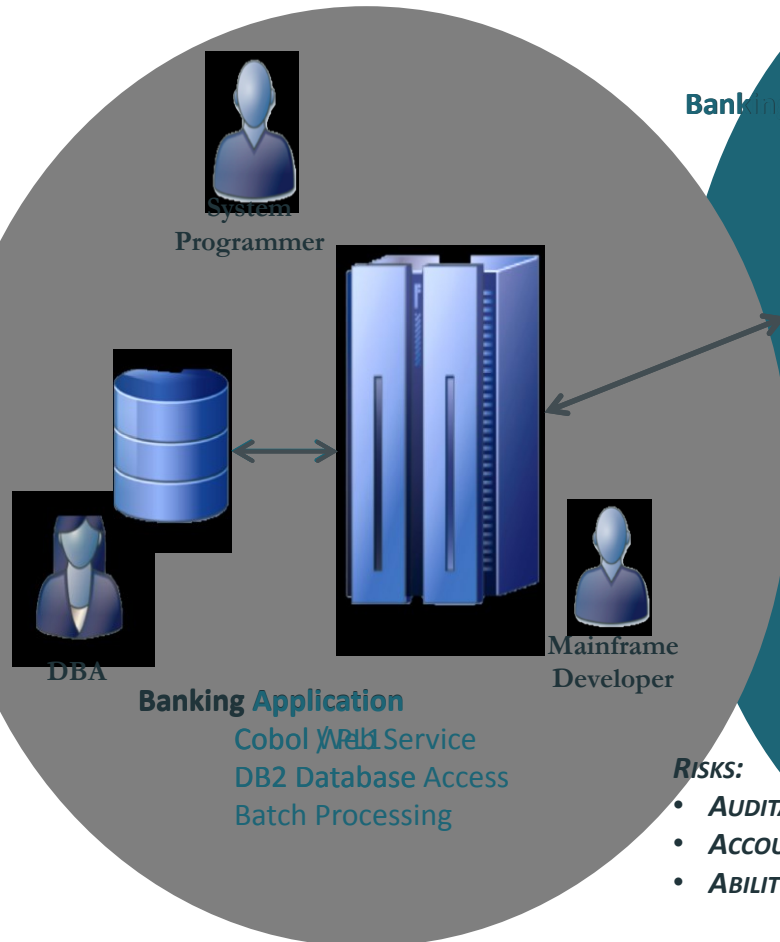
ENTERPRISE APPLICATION DEVELOPMENT REQUIRES CONTINUOUS INTEGRATION AND ORCHESTRATION BETWEEN DEVELOPMENT TOOLS TO PROVIDE *VISIBILITY, TRACEABILITY* AND *MANAGEMENT* ACROSS MOBILE, CLOUD, DISTRIBUTED AND MAINFRAME ENVIRONMENTS

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AppDev Migration from MF to Dynamic Data Center

RISKS:

- *KNOWLEDGE LOSS – AGING WORKFORCE*
- *DRAMATIC RISE IN LOAD FROM MOBILE*
- *DATA INTEGRITY CHALLENGES*

Cloud Services

Banking

System Programmer

Banking Mobile App
SOA
Cloud Services
Device Telemetry

DBA

Mainframe Developer

Distributed Developer

Mobile Developer

Banking Application
Cobol Web Service
DB2 Database Access
Batch Processing

RISKS:

- *RAPID INTRODUCTION OF NEW FEATURES*
- *AVAILABILITY OF DATA CENTER RESOURCES*
- *ACCESS CONTROL AND SECURITY CHALLENGES*

RISKS:

- *AUDITABILITY OF CHANGES*
- *ACCOUNTABILITY FOR INTRODUCTION OF DEFECTS*
- *ABILITY TO IDENTIFY BOTTLENECKS AND FAILURES*

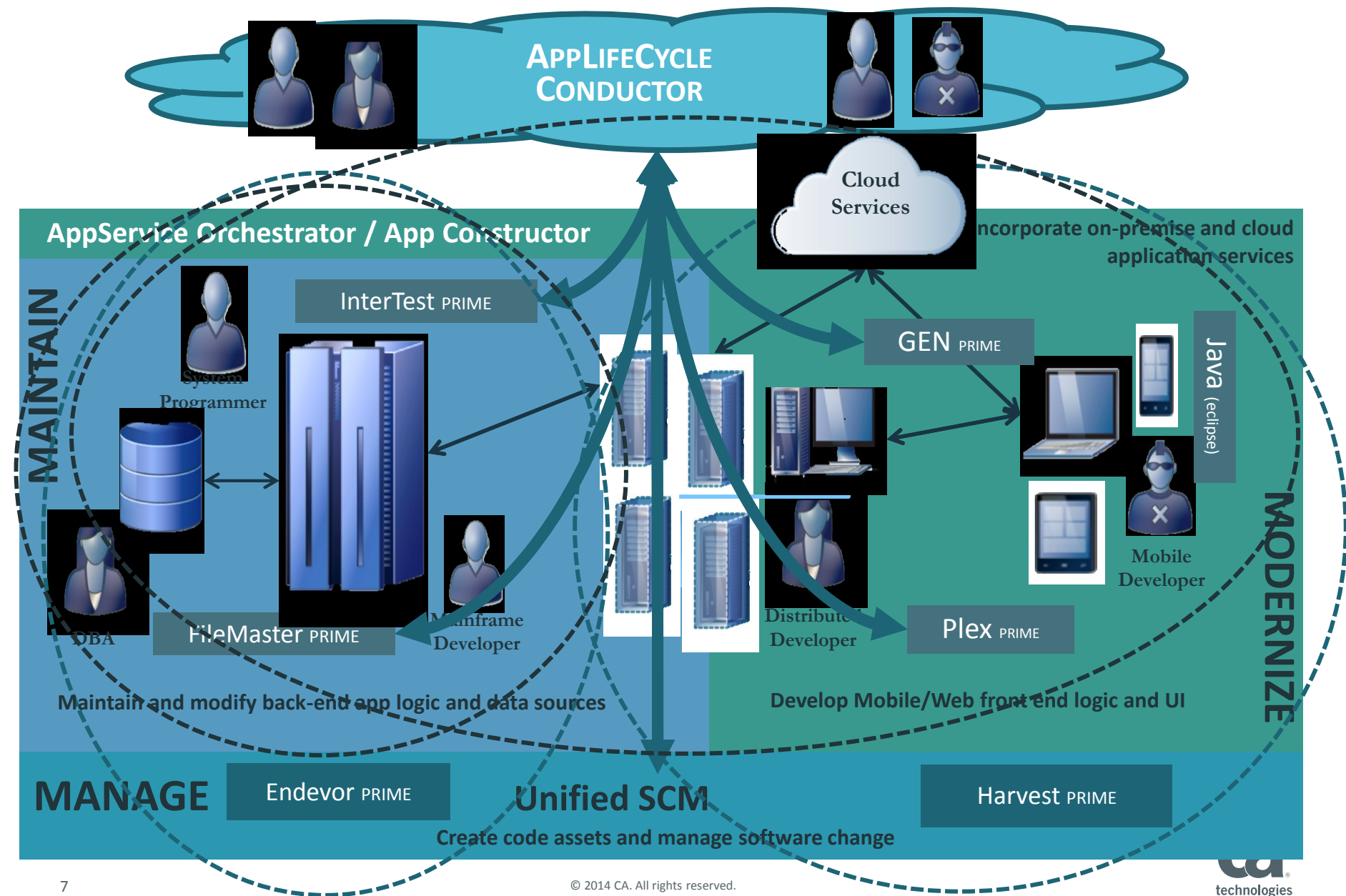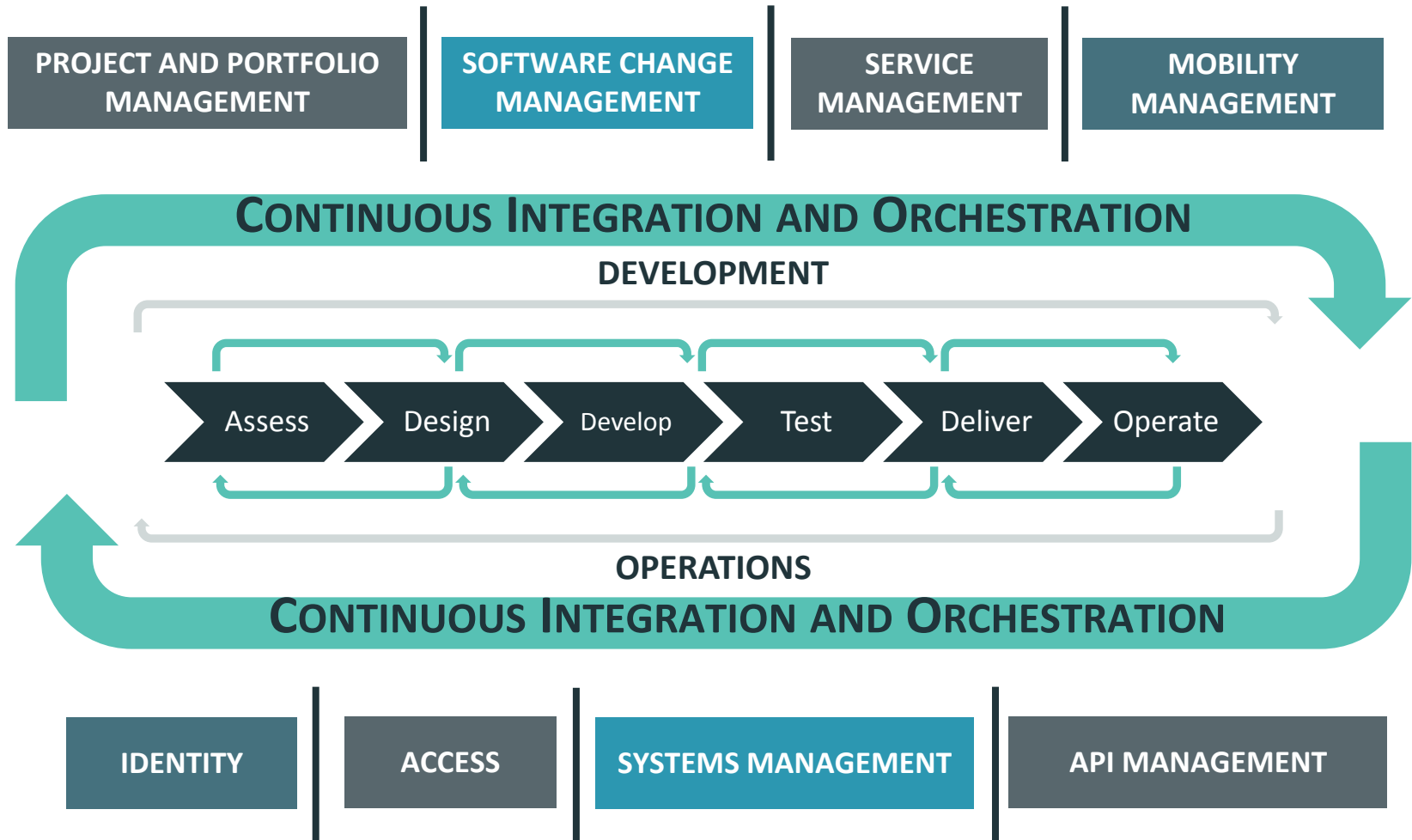**ca** technologies

The CA Application Development Solution

APPLIFECYCLE CONDUCTOR

Cloud Services

AppService Orchestrator / App Constructor

Incorporate on-premise and cloud application services

MAINTAIN

InterTest PRIME

System Programmer

GEN PRIME

Java (eclipse)

DBA

FileMaster PRIME

Mainframe Developer

Distributed Developer

Plex PRIME

Mobile Developer

MODERNIZE

Maintain and modify back-end app logic and data sources

Develop Mobile/Web front end logic and UI

MANAGE

Endevor PRIME

Unified SCM

Harvest PRIME

Create code assets and manage software change

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Continuous Integration and Orchestration of DevOps is a Critical Enabler of the Application Economy

| PROJECT AND PORTFOLIO MANAGEMENT | SOFTWARE CHANGE MANAGEMENT | SERVICE MANAGEMENT | MOBILITY MANAGEMENT |

CONTINUOUS INTEGRATION AND ORCHESTRATION

DEVELOPMENT

Assess → Design → Develop → Test → Deliver → Operate

OPERATIONS

CONTINUOUS INTEGRATION AND ORCHESTRATION

| IDENTITY | ACCESS | SYSTEMS MANAGEMENT | API MANAGEMENT |

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Enhanced AppDev *PRIME* Offerings

- **FileMaster** *PRIME* – *File Management, Data manipulation, and Data Creation*
  - Eclipse UI access to z/OS data files, IMS, & DB2, Futures: Oracle, SQL Server
  - Integrated Data Masking Capabilities (Grid Tools)

- **InterTest** *PRIME* – *Application Analysis and Debugging for System Z Applications*
  - Eclipse UI integrating InterTest & SymDump
  - Improved Installation and Enhanced Performance for SymDump

- **Endevor** *PRIME* – *Software Change Management and Deployment on System Z*
  - Eclipse GUI interface with Mobile Software Change (Package) approval
  - LISA RA integration for cross-enterprise release automation with mainframe assets

- **Harvest** *PRIME* – *Software Change Management and Builds for Distributed Systems*
  - LISA RA integration for cross-enterprise release automation with mainframe assets
  - Distributed builds & "package" creation to align Harvest with Endevor functionality

- **Gen** *PRIME* – Model Based Application Generator from Mobile to Mainframe
  - Delivery of model development through Eclipse-based Gen Studio
  - Extended support for publishing to App Service Repository

- **Plex** *PRIME* – Model Based Application Generator for Distributed Systems
  - Extended support for publishing to App Service Repository

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AppServices Orchestrator and App Constructor

APP CONSTRUCTOR

APPSERVICES ORCHESTRATOR

3rd Party App Builders

Banking App

- Orchestration: S1 -> S2, S3, S4

Banking Application

Layer 7 (App Repository)

- Cloud Services:
  - **S5:** Get Map
  - **S6:** Like on FB

Cloud Services

- App Services: **S1**: Login **S2**: Balances **S3**: Transfer **S4**: Mobile Payment

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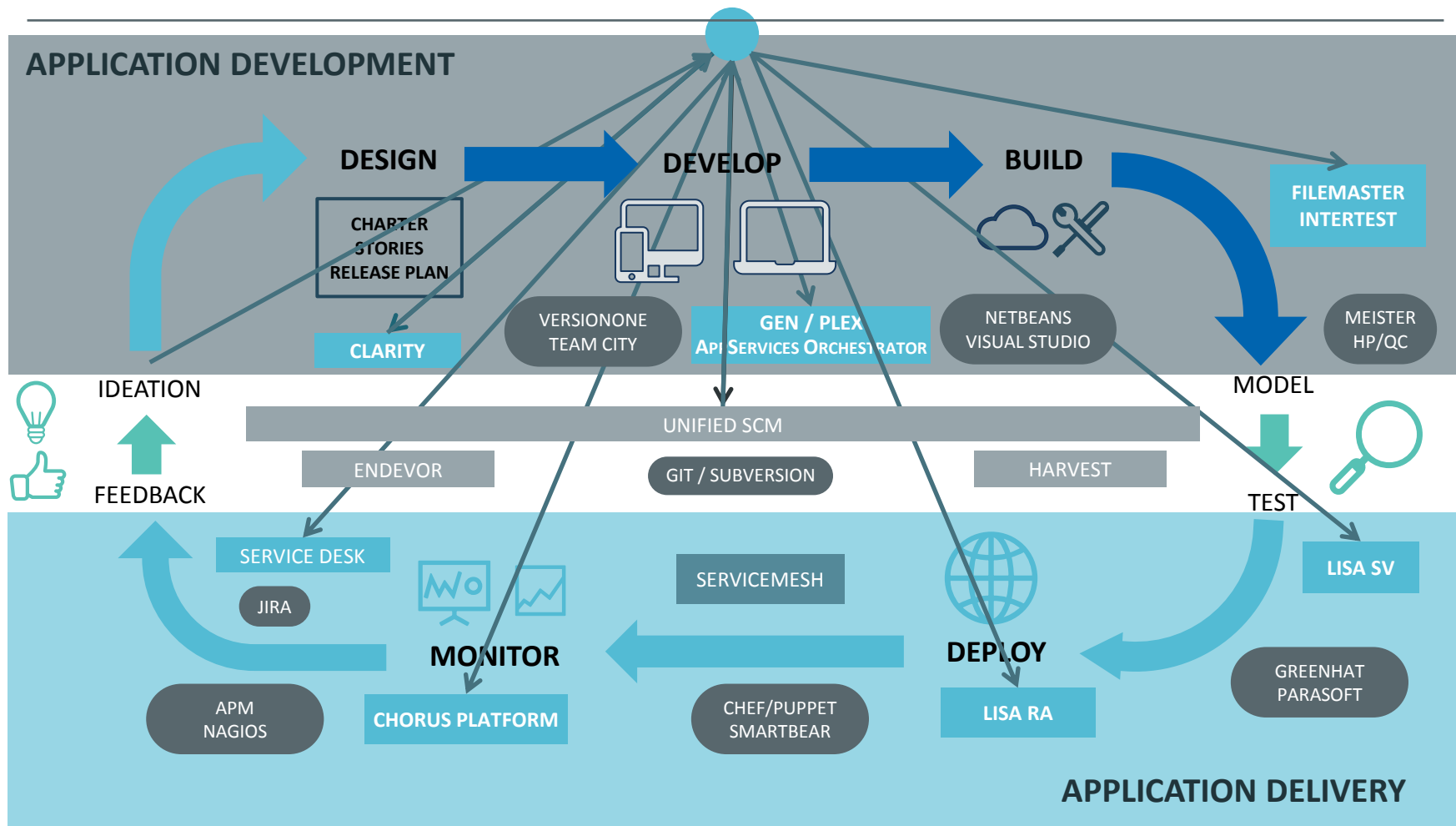technologies
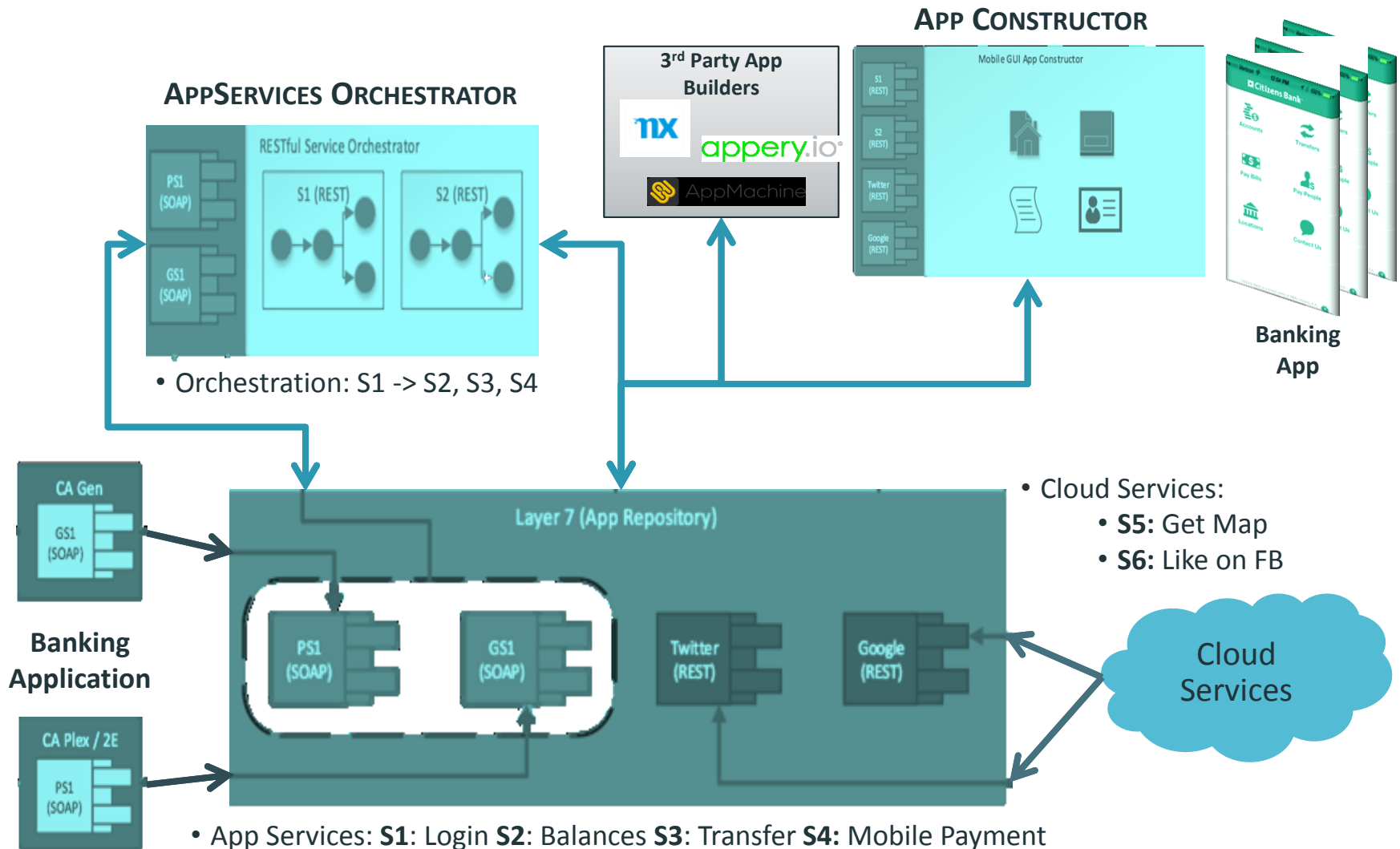
Unified SCM

- **Managing Software Assets from Mainframe to Mobile**
  - Normalized SCM functions for managing software assets across the enterprise
  - Full support for software audit, lifecycle management, and XXX
  - Common Integrated User Interface (Eclipse, HTML, IDE Plugin)
  - UX Emphasis towards:
    - Platform agnostic
    - Ease of use; lighting-fast adoption
    - Industry known terminology
    - Integration with high-use, open source tooling
  - Preserves the investment in current SCM solutions

| CHECK-IN | • • • | CHECK-OUT | • • • | MERGE | • • • | PROMOTE | • • • |

UNIFIED SCM

| ENDEVOR PRIME | 3RD PARTY SOLUTIONS GIT, SVN, etc. | HARVEST PRIME |

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App Lifecycle Conductor

Continuous Integration And Orchestration Between Application Development Technologies To Visualize, Control And Manage Flow Across The Development And Delivery Process

APP LIFECYCLE CONDUCTOR

APPLICATION DEVELOPMENT

DESIGN → **DEVELOP** → **BUILD** → **FILEMASTER INTERTEST**

CHAPTER STORIES RELEASE PLAN

CLARITY

VERSIONONE TEAM CITY

GEN / PLEX
APP SERVICES ORCHESTRATOR

NETBEANS VISUAL STUDIO

MEISTER HP/QC

IDEATION

MODEL

FEEDBACK

UNIFIED SCM

ENDEVOR

GIT / SUBVERSION

HARVEST

TEST

APPLICATION DELIVERY

SERVICE DESK

JIRA

SERVICEMESH

LISA SV

MONITOR

DEPLOY

APM NAGIOS

CHORUS PLATFORM

CHEF/PUPPET SMARTBEAR

LISA RA

GREENHAT PARASOFT

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Application Development Business Line

CA's Application Development business line delivers a comprehensive solution for application developers to *build and maintain* critical business applications, *manage* modifications and enhancements over time and *modernize* them to meet the mobilization and consumerization trends of today's agile IT organizations.

AppDev Product Offerings

Now

APP LIFECYCLE CONDUCTOR

UNIFIED SCM

Maintain

FileMaster PRIME
(z/OS, IMS, DB2, **Data masking**)

InterTest PRIME
(CICS, Batch, SymDump)

Modernize

GEN PRIME

Plex PRIME

Manage

Endevor PRIME
(All Endevor components)

Harvest PRIME
(Harvest **Premium**)
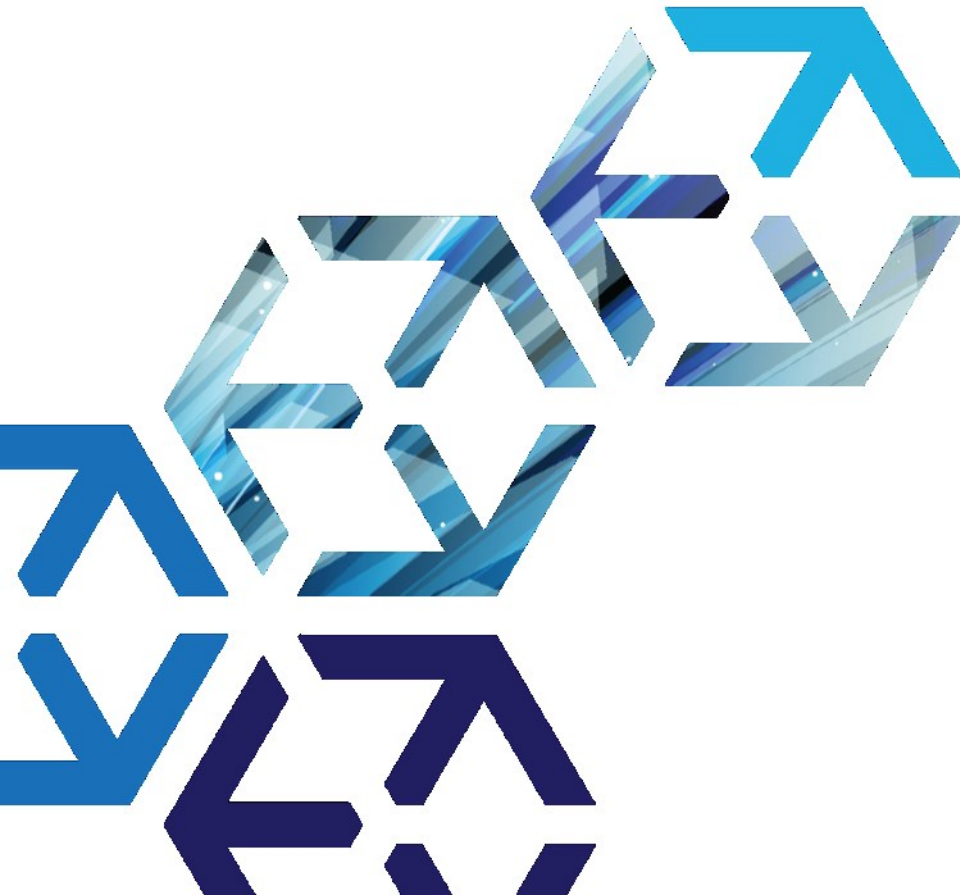
APPSERVICES ORCHESTRATOR
APP CONSTRUCTOR

New

- Additional Portfolio Products -

Verify * Optimizer *SymDump System * 2E * Easytrieve * Aion * Telon * Panvalet * Librarian

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Thank You!
Q&A

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