Welcome to the

BUILDER™ SUMMIT

August 14-15TH, 2019 | Keck Center – Washington DC

REMOTE ATTENDEES
"B" Sessions: Keck - E Street Conference Room
WebEx: https://usace.webex.com/join/michael.n.grussing
Security Code: 0814#

ERDC — ENGINEER RESEARCH & DEVELOPMENT CENTER **DIGON SYSTEMS**

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BUILDER™ SUMMIT

System Integration Workshop

BUILDER API Workshop
Presented by Kurt Sorensen, DIGON Systems

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Introductions / Experience

- Kurt Sorensen

  President, DIGON Systems

  BUILDER CRADA /
  Distribution Partner

- USDA-ARS
  - ✓ DudeSolutions Import File
- Archibus
  - ✓ Database Integration Support
- NNSA
  - ✓ Maximo, AssetSuite, Gov Applications API Integration
  - ✓ RS Means
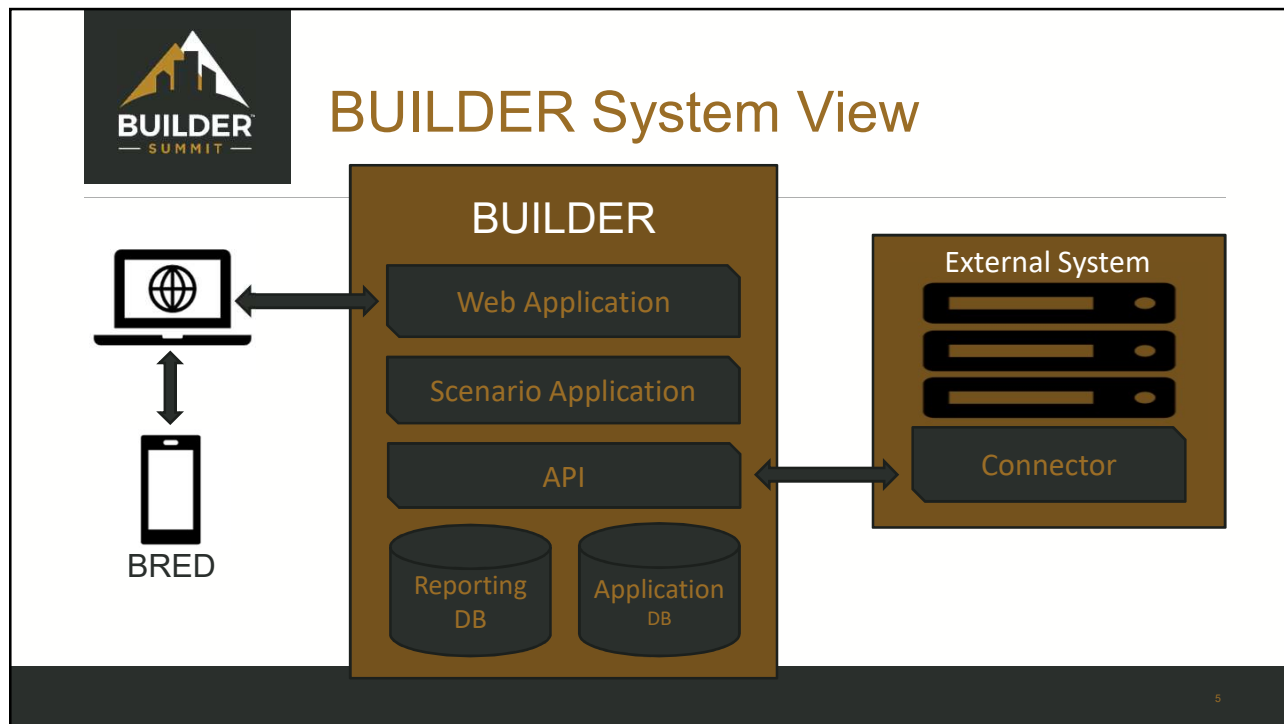- Air National Guard
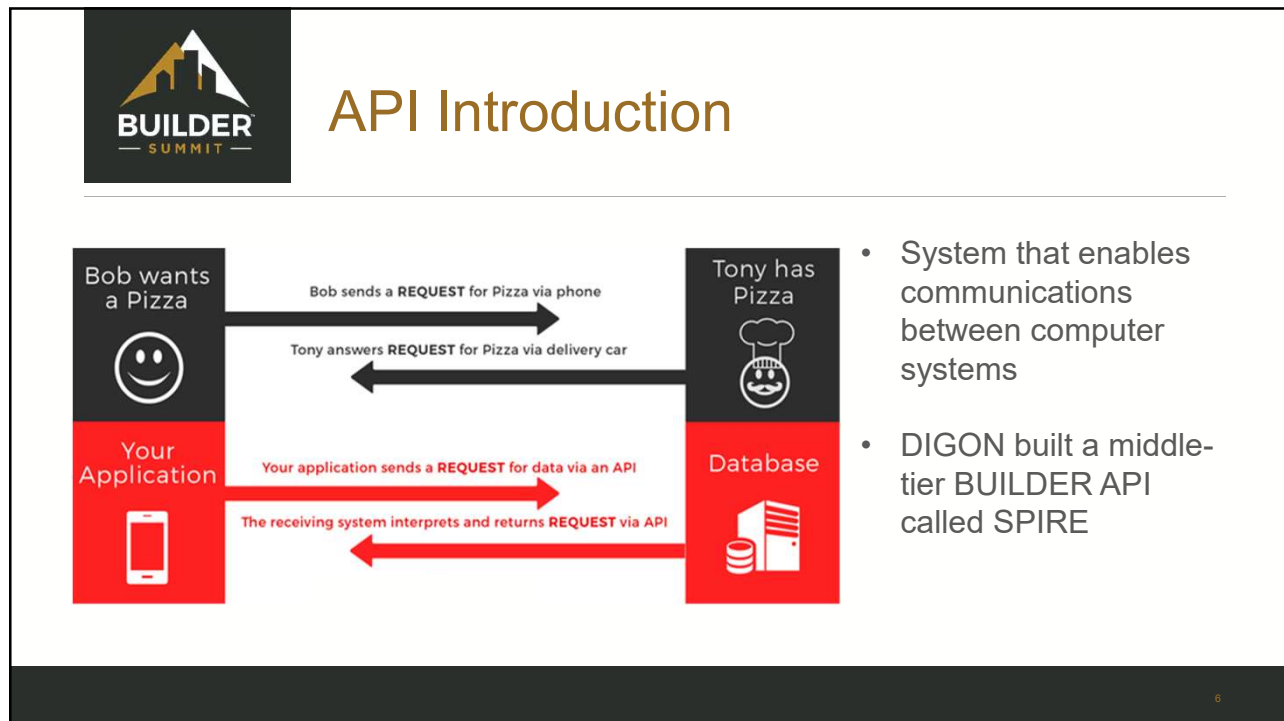 - ✓ iEMS API Integration

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Breakout Session Goals

- Introduce Application Programming Interface (API)

- Outline BUILDER API Capabilities / Limitations

- Discuss Application Technology Trends

- API Tool Exercise

- Lessons Learned / Q&A

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BUILDER System View

BUILDER

Web Application

Scenario Application

API

Reporting DB

Application DB

BRED

External System

Connector

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API Introduction

Bob wants a Pizza

Bob sends a REQUEST for Pizza via phone

Tony answers REQUEST for Pizza via delivery car

Tony has Pizza

Your Application

Your application sends a REQUEST for data via an API

The receiving system interprets and returns REQUEST via API

Database

- System that enables communications between computer systems

- DIGON built a middle-tier BUILDER API called SPIRE

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Existing Documentation

- CERL has documentation that is targeted to a software developer audience

Adobe Acrobat Document

- DIGON has documented the commonly used API data elements for our SPIRE integration tool

Microsoft Excel Worksheet

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Current Capabilities

- Buildings

- Inventory (Systems, Components, Sections)

- Inspections

- Work Items*

- Scenarios

- User Management

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Limitations

Excluded Capabilities
- Reports
- BRED Tools
- Work Configuration
- Functionality Assessments

New Features
- Catalog Management
- Photos

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Inventory - Known Issues

- The API will not accept any catalog changes while the BUILDER web interface will allow a L4/5 update
  Example: 5hp pump to a 10hp pump

- Remember that you must create any missing Systems and Components before adding sections to that area of UNIFORMAT

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Inspection - Known Issues

- The API requires a CI number and not a direct rating color

- Recent bug deletes inspections if viewed in the interface (planned hotfix)

- API can update past inspections without the date limit enforced through the UI
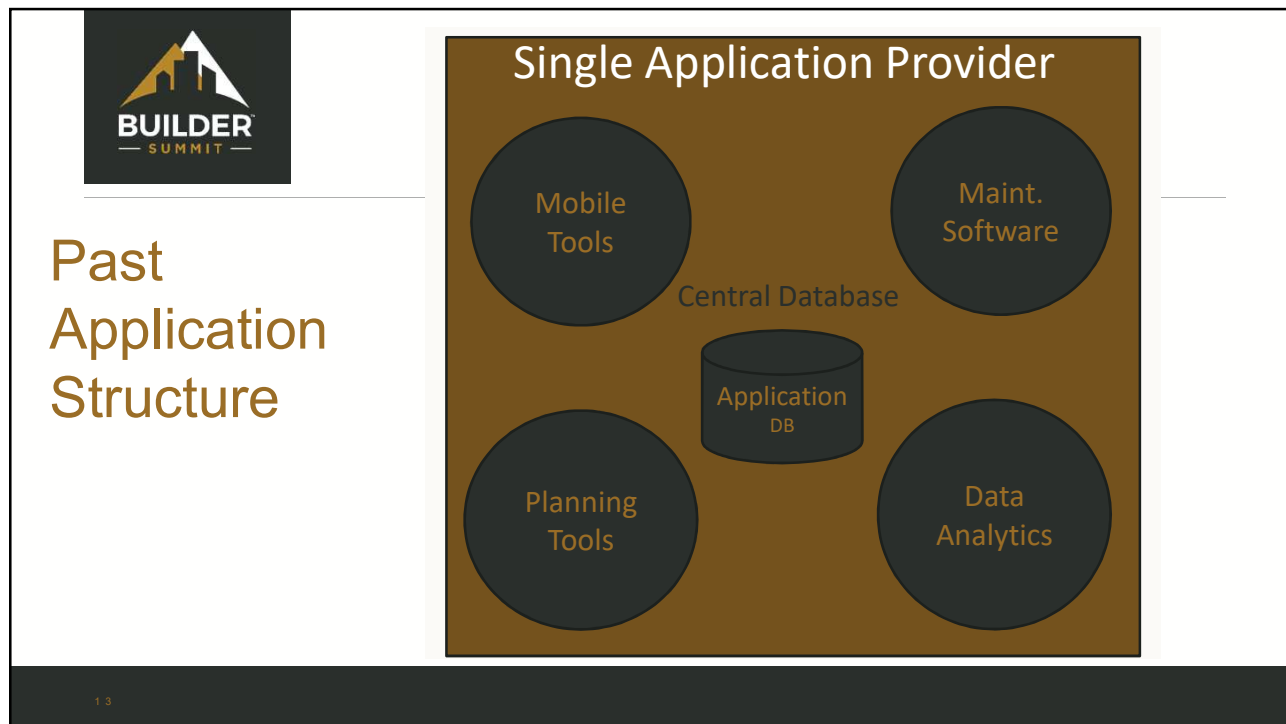
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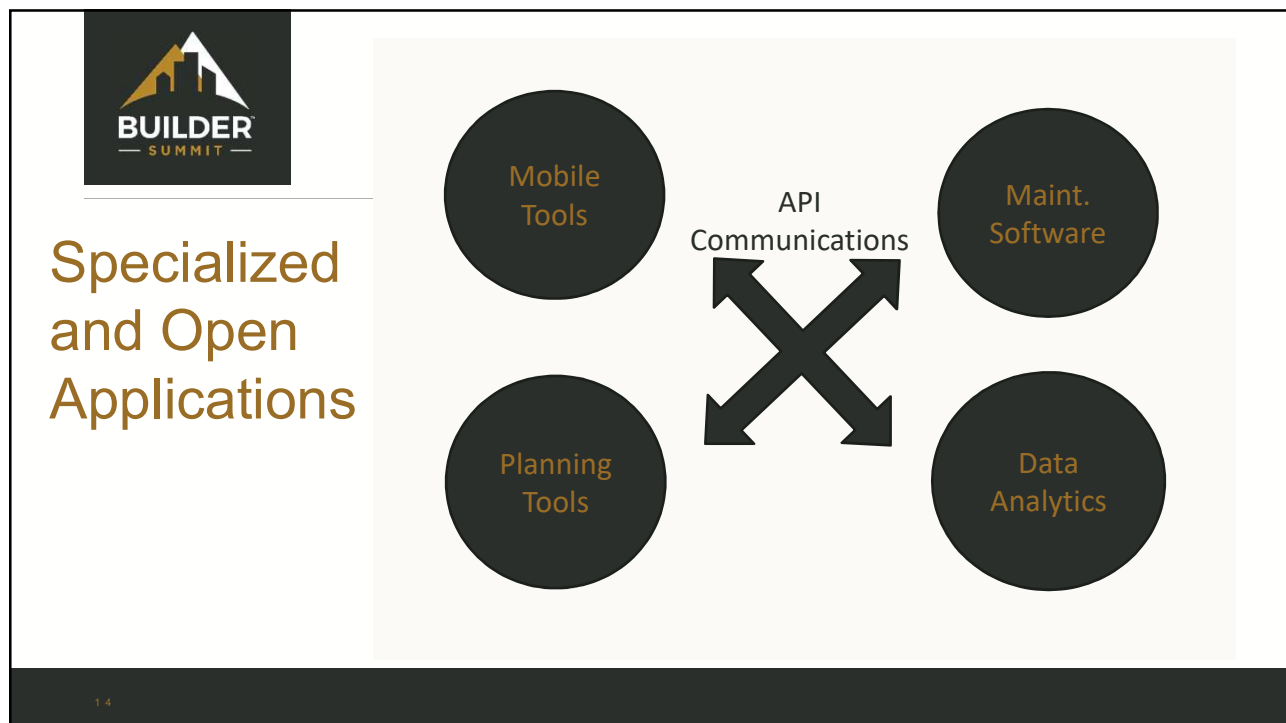# Work Management - Known Issues

- Cannot generate work plan items through the API

- Setting a work item status to complete does not yet perform all the required inventory updates
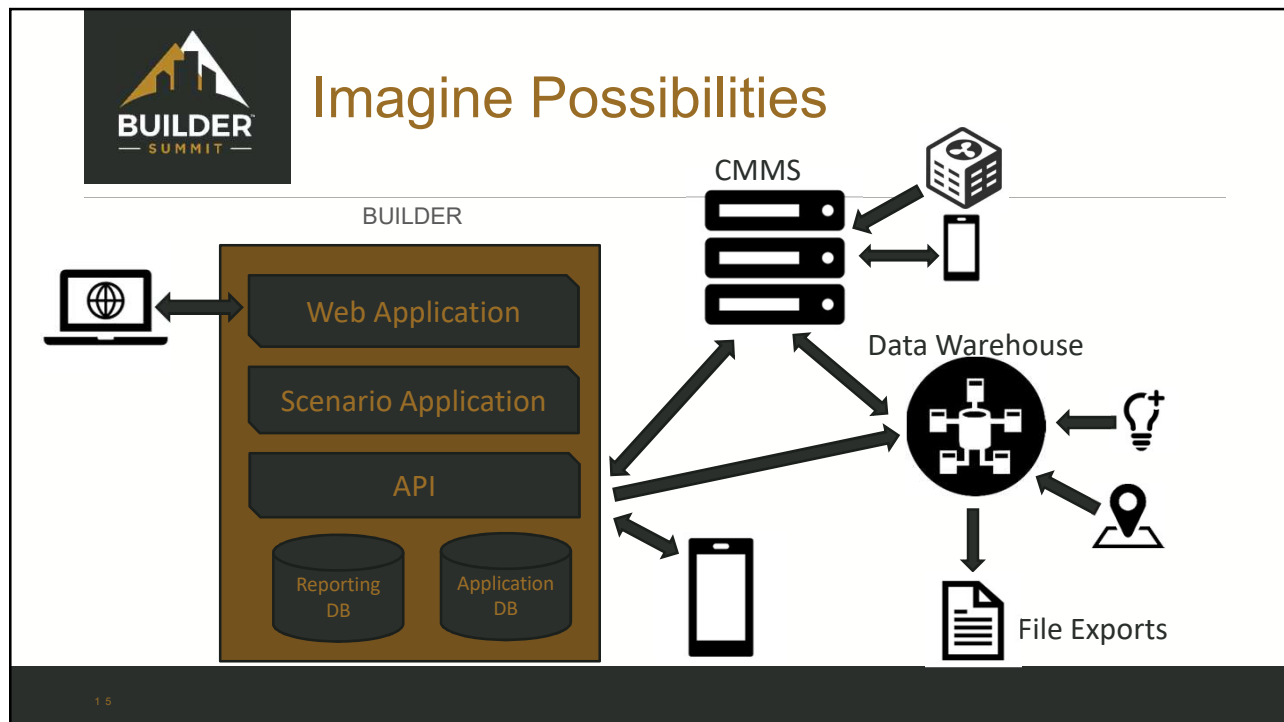
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Past Application Structure

Single Application Provider
Mobile Tools
Maint. Software
Central Database
Application DB
Planning Tools
Data Analytics

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Specialized and Open Applications

Mobile Tools
API Communications
Maint. Software
Planning Tools
Data Analytics

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Imagine Possibilities

BUILDER

Web Application

Scenario Application

API

Reporting DB

Application DB

CMMS

Data Warehouse

File Exports

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eSMS BUILDER Development

Enterprise SMS (eSMS) is under development and targeting BUILDER capabilities in the next few years

- Current BUILDER is a SOAP based API

- Enterprise SMS is REST based API

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Demonstration / Working Session

- https://buildersummit.com/resources/

- API Connector Tool
  - Unzip to Desktop
  - Change Server URL
  - Change User Email / Password

- API Connector Source Available to Download

- Connect to a Server

- Sample Playground
URL: https://demo.buildersoftware.net
User: info@digonsystems.com
Password: Pass4API

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Lessons Learned

- Section equipment grouping is not common in CMMS

- Understand the data ownership relationships

- Bring in Information Assurance / Cyber Security early

- Work items often are re-generated

- Test performance early with large datasets

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Thank You

Next Summit Summer @ San Antonio
February 12-14, 2020

Please send feedback and future discussions to:
kurt@digonsystems.com

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