knowledge16

Experience the Service Revolution



The Latest in Integration 301

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Introduction to Presenters

- Dave Slusher
  Developer Evangelist, Platform Business Unit
  - 2.5 years at ServiceNow, 3rd Knowledge
  - Platform, previously in Expert Services
  - http://developer.servicenow.com/
  - Based in Conway, SC
- Chris Collazo
  Platform Architect, Pre-Sales
  - 4 Years at ServiceNow, 4th Knowledge
  - Pre-Sales Architect for the East
  - Based in Hartford, CT

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Agenda

Scripted REST APIs

Attachment API

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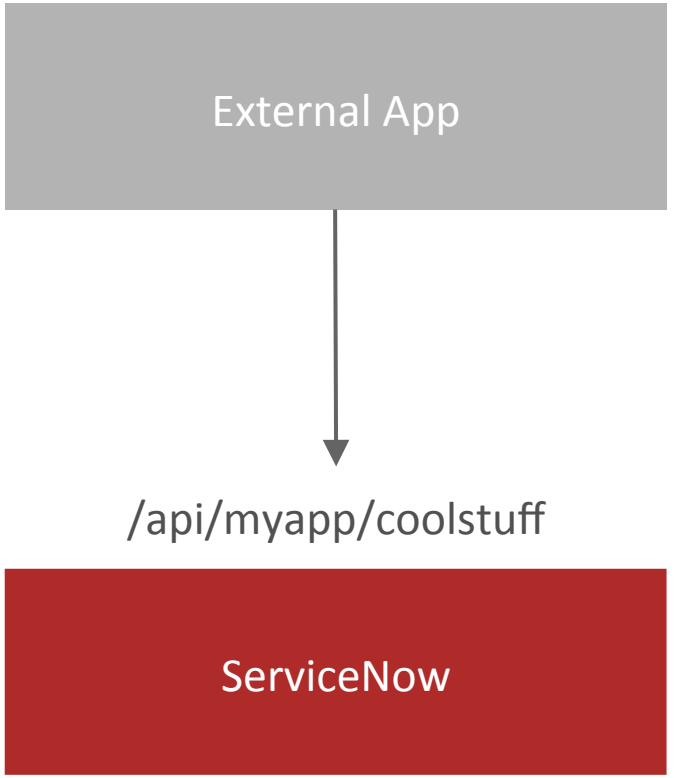
Overview of Lab

- Goal: Familiarity with creating Scripted REST APIs
  - Understanding of the HTTP verbs and how to use them
  - Understanding of the HTTP headers and content negotiation
  - Familiarity with the Rest Explorer tool
- Goal: Introduction to the Attachment API
  - Ability to write integrations via the Attachment API

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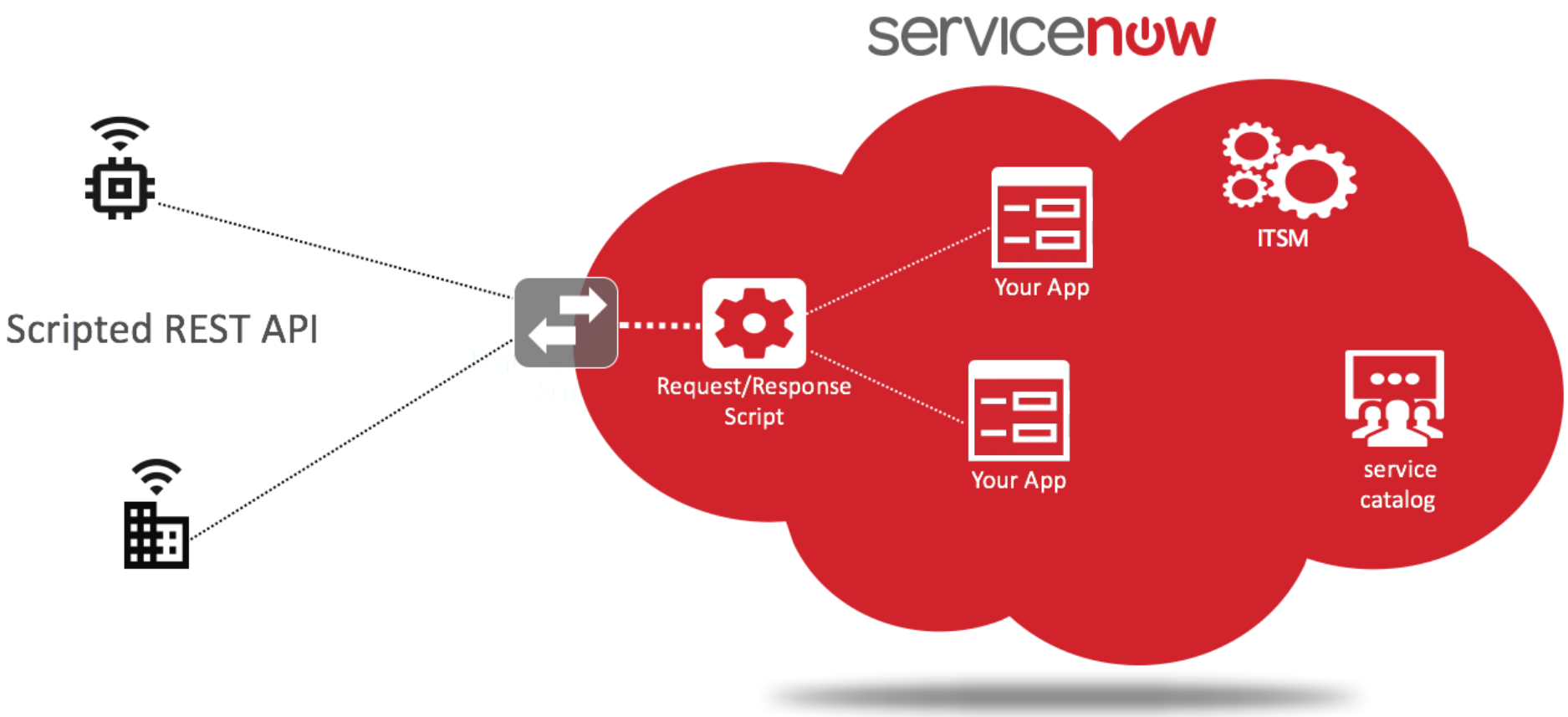
Scripted REST API

- When should I use it?
  - To expose a custom API for your app other than the default REST Table API
  - When you need to return a custom response format
  - When an external app needs to execute code inside ServiceNow
- Example use cases
  - External portal that orders items from the Service Catalog
  - Hide complex, multi-step operations behind a single API call
  - Implement API Gateway pattern with single entry point
- What does it replace?
  - Custom Processors
    - Foundational concept (150+ OOB), but not well suited for custom apps
    - Complex, not well documented
  - May replace scripted SOAP web services



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Scripted REST API



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Lab 1

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Scripted REST APIs

Provide the ability to build REST web services on the ServiceNow platform, with first class support for the features API providers and clients expect in a RESTful API

- Build a custom API supporting:
  - Custom path
  - Custom path parameters
  - Custom query parameters
  - Custom headers
  - Versioning
  - REST API Explorer Support

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Scripted REST APIs

Provide the ability to build REST web services on the ServiceNow platform, with first class support for the features API providers and clients expect in a RESTful API

- Scriptable API with full access to:
  - Request
  - Response
  - Error Objects
- Documentation
- Content Negotiation
  - Both input and output
  - Controlled by HTTP headers

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Use Cases for Scripted REST APIs

- Support Legacy Integrations
  - Integrate with black box systems
- Define external APIs logically by function
  - Abstract out implementation details
  - Design API independently of table structure
- Packaged in a Scoped Application
  - Whether exposing scoped application data or core data, the API itself is in a scope

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Labs 2, 3, 4 and 5

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Best Practices

- Version your API
  - Isolates changes and protects existing integrations
- Define logical API
  - Define based on functionality, not on underlying details
  - Opposite of using Table REST API for integration



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Licensing Considerations

- No additional licensing to use Scripted REST API
- Same as if functionality was invoked by web UI

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Reference Information

- Product Documentation
  - https://geneva-docs.servicenow.com/integrate/custom_web_services/concept/c_CustomWebServices.html
- Community Post
  - https://community.servicenow.com/community/develop/blog/2016/02/24/introduction-to-scripted-rest-apis

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Labs 6 and 7

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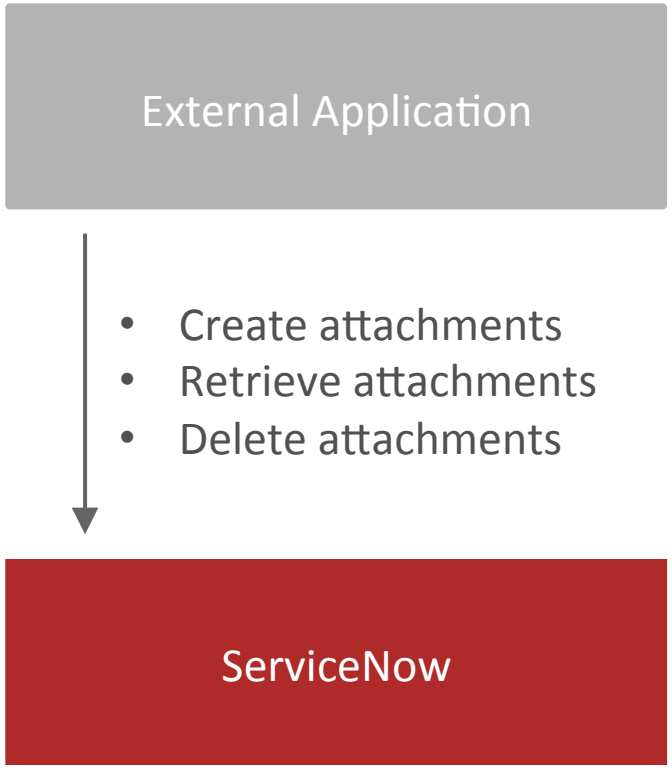
Top Takeaways

1. Scripted REST APIs are a powerful addition to the developer toolkit.
2. They allow you to expose scripted functionality with custom endpoints.
3. A good replacement for both AJAX Script Includes and Processors.

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REST Attachment API

- When should I use it?
  - When you need to create/delete/retrieve attachments via an external app
  - Example use cases:
    - Synchronizing attachments with a document repository
    - Downloading attachment data from an instance
    - Mass-uploading attachments
- What does it replace?
  - May replace AttachmentCreator Web Service (ECC Queue)
    - AttachmentCreator is still required if client must send attachment data as Base64
  - Manual workarounds such as scripted web services
    - No need to create custom/complex web services to expose attachment data



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REST Attachment API

- Create Attachment
  - POST /attachment/file?…table_name... - Simple Binary
  - POST /attachment/upload - Multipart
- Get Attachment(s)
  - GET /attachment/{id} - Get a single meta representation of an attachment
  - GET /attachment - Get a collection attachments meta representations
  - GET /attachment/{id}/file - Get a single binary representation of an attachment
- Delete Attachment
  - DELETE /attachment/{id} - Delete an attachment

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Rest Attachment API Resources

- Attachment API Documentation Entry Point (hosted at docs.servicenow.com)
  - Get attachment metadata for multiple attachments
  - Get attachment metadata for single attachment
  - Get attachment content
  - Create an attachment from binary
  - Create an attachment from multipart upload
  - Delete an attachment

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Lab 8

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Top Takeaways

1. Attachment REST APIs allow external apps access to metadata/binaries.
2. Allows for read and write integration access.
3. Eliminates custom development to expose access to attachments.

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Take the Survey

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Thank You

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