



Code Driven Comms

Siemens Open Source Conference 2023

Agenda

- Who is talking
- Where Communication Goes Code-Driven
- What is the need to be Code-Driven
- The Foundational Framework
- Rewards: Understanding the Outcomes
- A Real-world Example of Application Integration
- CMS Evaluation for the Next Era of Comms



Who is talking?

Christoph Lumme
Communications
Technology & Delivery



- 16 Years with Siemens
- Web/E-Commerce
- Based in Zurich
- Passion: Technology

Who is not talking today?

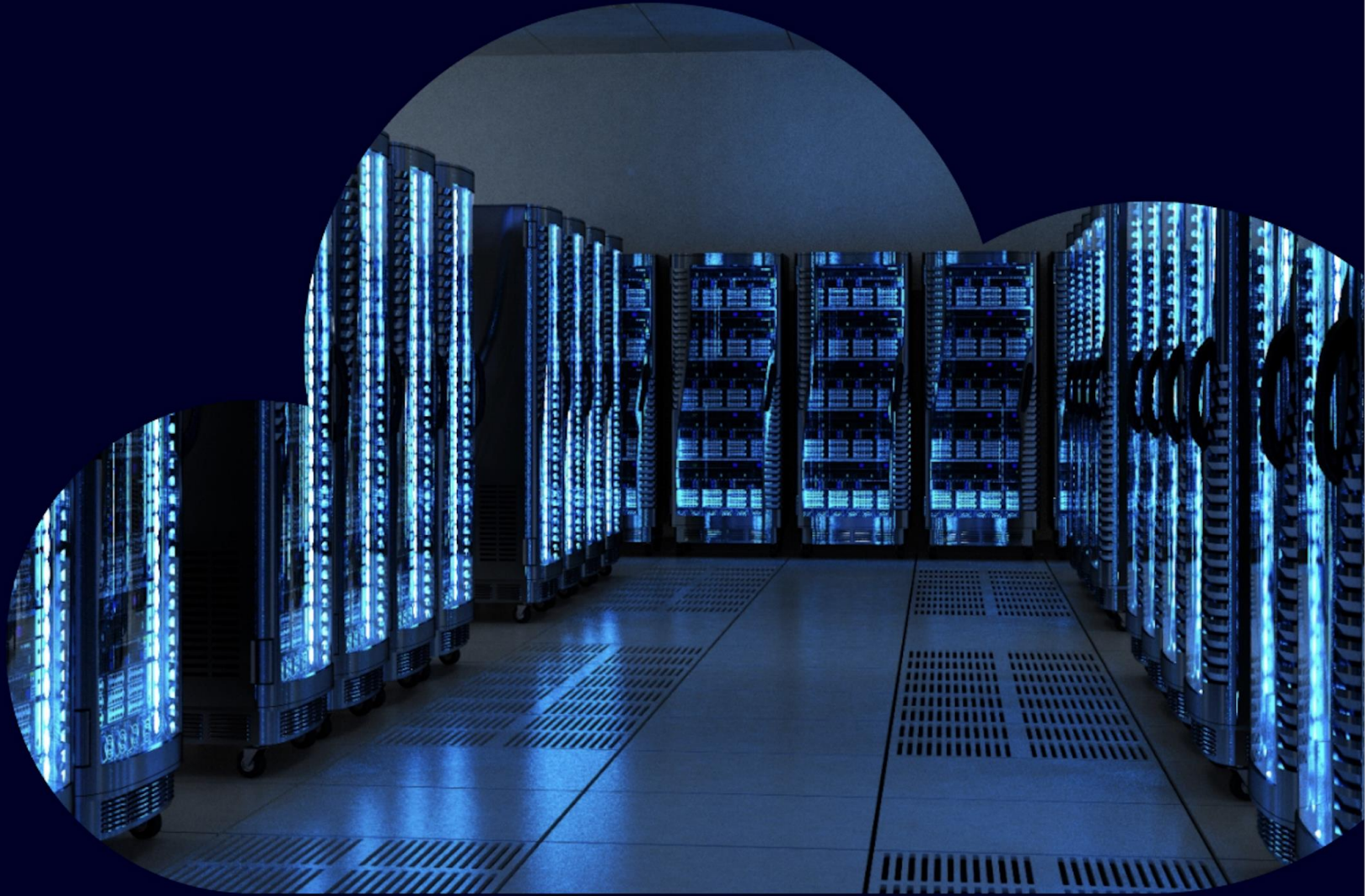


Fabian Fischer
Communications
Technology & Delivery

- 20 Years with Siemens
- Web/E-Commerce
- Based in Nuremberg
- Passion: Everything code

Where Communication Goes Code-Driven

- Technology
 - Infrastructure
 - Services
 - Applications
 - Processes



What is the need to be Code-Driven

2018 → New era of Digital Comms

- Agile way of working → Fast Delivery on Increments
- Support business transformation
- Scale from one to many services

VS

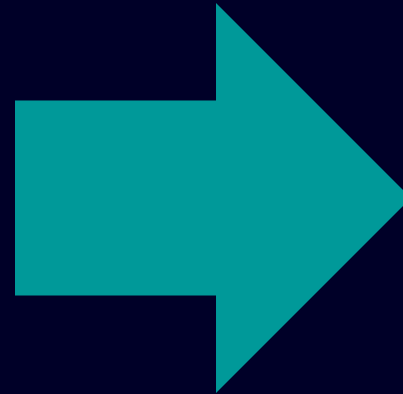
All external

- No control
- Unclear processes
- Lack of system stability and performance
- Long Release cycles (2-3 times year)



The Foundational Framework

- Empower with Knowledge: Building In-house expertise
- Streamline & Scale: Automation as a Key Driver
- Mastering Ownership: Our Code, Our Asset
- Data-Driven Decisions: Log Everything, Regulate Costs & Efforts
- Leveraging Innovation: Open Source & Serverless Solutions
- Fast & Flexible: Start Small, Constant Refactoring, Embrace YAGNI
- Loose coupling: API-First, Event based



Reward

Foundati

- code.
- Sieme
- Core Op
- GitLab
- Word
- Apollo
- Vue.js
- Facts
- > 100
- > 200
- > 120

Siemens Clients
External Clients

Comms Cloud

Average monthly HTTP requests
1.600.000.000

Average monthly traffic
75 TB

Average time taken
0.271s

Average time to first byte
0.221s

Global Content Acceleration and Delivery Network

SaaS Services

- Adobe Launch
- Adobe Analytics
- Lingotek Translation Services
- Usercentrics Consent Management
- Sprinklr
- Azure OpenAI

Inbound APIs	Outbound APIs	www.siemens.com Headless Delivery Frontend (Rebrand)	Siemens Hello Page	CMS
<ul style="list-style-type: none"> Content Ingestion for Search Content Fragment Ingestion .com Asset Ingestion Sprinklr one2edit SalesForce Connector Generic REST or GraphQL Interface 	<ul style="list-style-type: none"> Assets API Headless Content Delivery SiePortal Content Delivery Highspot Sprinklr one2edit yessPress SalesForce Connector Generic REST or GraphQL Interface 	<ul style="list-style-type: none"> Smart Authoring Services Fragment Based Authoring Machine Learning and Artificial Intelligence Services Machine Translation Services Customer Classification Services Content Recommendation Services 	<ul style="list-style-type: none"> Fragment Store Marketing Products Press References SiePortal Mindsphere AI/ML based fragment recommendation engine 	<ul style="list-style-type: none"> Siemens Hello Page Blog SiemensWorld Siemens Blog Charter of Trust Siemens.FM Podcasts Siemens References Global Webcasts
<ul style="list-style-type: none"> Event Bus C2 Message Queue Services C2 Notification Services 	<ul style="list-style-type: none"> Web Frontend 3rd party Integrations Chatbots Product Configurators Contact Forms > 100 further integrations 	<ul style="list-style-type: none"> Search Engine Crawler based continuous ingestion pipeline Event based continuous ingestion pipeline 	<ul style="list-style-type: none"> DPS Registry Redirect Tool 	<ul style="list-style-type: none"> Static File Hosting External Static File Hosting Internal Static File Hosting Special Hosting Siemens PKI Redirect Hosting Siemens Global Analytics Hosting Siemens Firmware Redirect Hosting TIA Portal Updates Redirect Hosting Siemens SNX Connector
<ul style="list-style-type: none"> Digital Asset Management Image & Video renditions Legal Documents Search & Download for agencies Brightcove Video CDN 	<ul style="list-style-type: none"> Datalake Analytics Unlocked Datahub 	<ul style="list-style-type: none"> Infrastructure Services S3 Virus Scanner Global WAF Controller Global Loghub Certificate Manager Generic Authentication Connector Monitoring, Alerting Backups Siemens Global CDN Service Sentry Email Service Siemens Network Zone Detection Engine Factory Monitor Proxy Services CSC Gitlab Runner 	<ul style="list-style-type: none"> Authentication Providers Internal Users myID Azure AD External Users WebSSO SiemensID WebKey 	

Authentication Providers

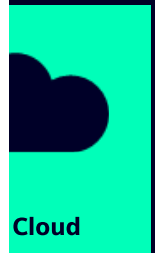
- Internal Users
- myID
- Azure AD
- External Users
- WebSSO
- SiemensID
- WebKey

code.siemens.com

- Source Code Repositories
- Infrastructure Automation
- Test Automation
- Continuous Integration
- Continuous Delivery
- Deployment Automation

Further Supporting Services

- Atlassian Jira
- Atlassian Confluence
- Browerstack
- Slack
- Terraform



Revision: 2022-11-24

A real-world Example of Application Integration

- What: Integration of 3rd party code into siemens.com frontend (> 250 integrations, > 30 external partners)
- Challenge: Stick to our principles (own the code, automation, system stability) and ensure web consistency

Request App

Siemens AG & Siemens Energy / External Ecosystems Helpdesk

External Ecosystems Helpdesk

Systems and Applications in the INTERNET (e.g. AEM, DAM, I-Est, One2Edit, Press Portal, Sprinkler, JiraConfluence, CES-myID). Here you can request and remove user rights, get technical support and solve your login problems. You can select the specific system later in the drop-down.

- The service hours are Monday to Friday 8:00 am to 5:00 pm (CAT) & (CET)

Please note: Each application requires its own user rights application. Collective requests are not possible as approvals are not done by one person.

If you want to raise a request regarding Demand Generation (Eloqua), please go to <http://elouqa.siemens.com/demand-generation-servicesdesk>.

What can we help you with?

Rebranded Web-Application Upload BAG
If you have questions to the overall web application process, please visit:...

Raise this request on behalf of *

Christoph Lumme (christoph.lumme@siemens.com)

Name of application *

Business owner of application (Email address) *

Please use @siemens.com address

E-Mail address of app owner AEM Author

Please use @siemens.com address

E-Mail address of developer(s) please separate with ;



Develop, Test, Review, Publish

CM ET Private Projects / Web Frontend Applications / Applications

feat: add: CYS DEF PCERT
Christoph Lumme authored 1 week ago

```
main applications / terraform / terraform.tfvars
```

```
1 applications = {
2   "Test App" = {
3     content_owner = "fabian.fischer@siemens.com"
4     org_code      = "CM ET SU"
5     comment       = "no ticket - repo of the example application"
6     s3_enabled    = true
7   }
8 }
```

Application SubHeadline Application

Select your model

Customize your model

- Individualize the design
- Choose your second DC outlet: CCS or CHAeMO
- Integrate an emergency stop
- Offer the credit card contactless payment terminal
- Integrate additional AC socket to increase parallel charging up to 3 vehicles

Prepare validate build deploy

test deploy post

App finished - please approve!

Merge blocked: all threads must be resolved.

WebServices Communications @webservices.communications 2 days ago

Resolved just now by Christoph Lumme

Tech Review: @siemens.com @siemens.com @siemens.com Please check the application for technology issues. Add review comments as needed and resolve the thread only if all issues have been solved.



Deliver

Select your model

Reset Position

Customize your model

- Individualize the design
- Choose your second DC outlet: CCS or CHAeMO
- Integrate an emergency stop
- Offer the credit card contactless payment terminal
- Integrate additional AC socket to increase parallel charging up to 3 vehicles

Explore in your location

Switch to AR

Comms Cloud

code.siemens.com

For Developers

From Developers

```
def from_settings(cls, settings)
  @classmethod
  def from_settings(cls, settings)
    debug = settings.getbool('debug')
    cls(job_dir(settings), debug)
```


CMS Evaluation for the Next Era of Comms

An open source and serverless alternative

