Faster, higher
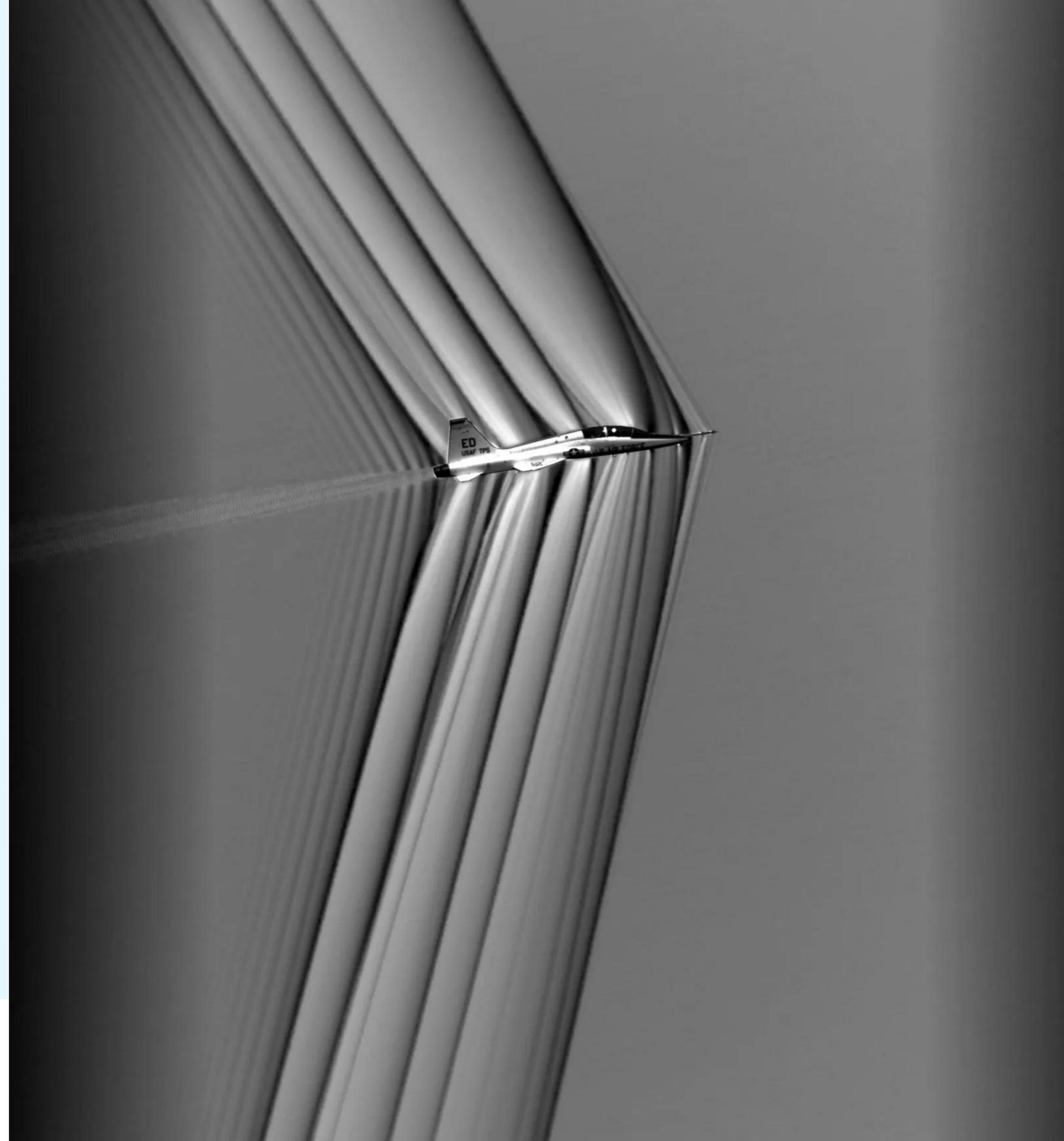
IBM Engineering
Lifecycle Management
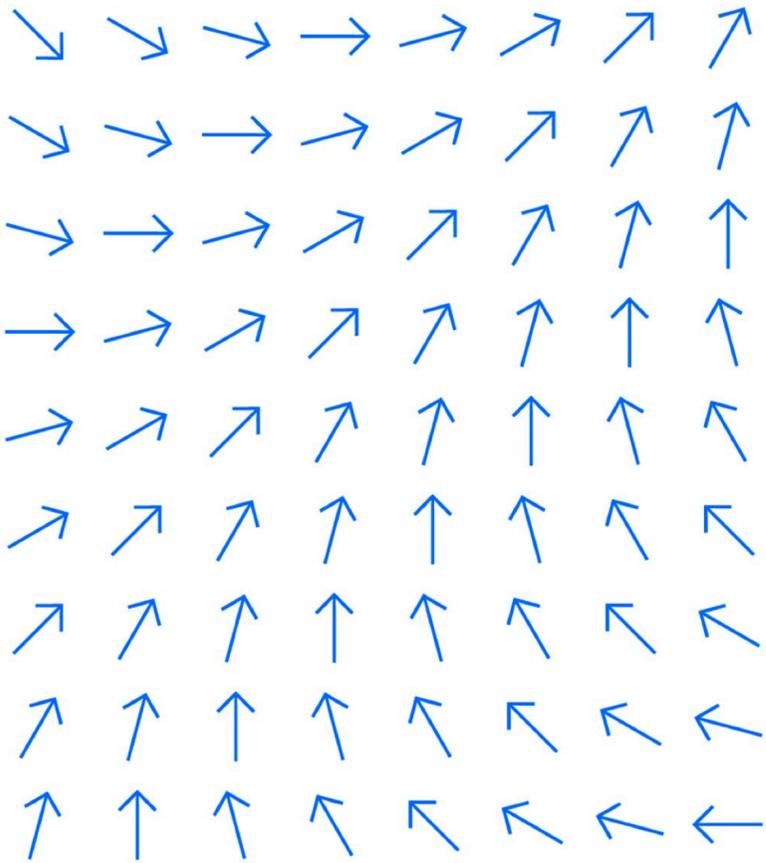## Past, Present, Future

Harry Donaghy
Product Manager

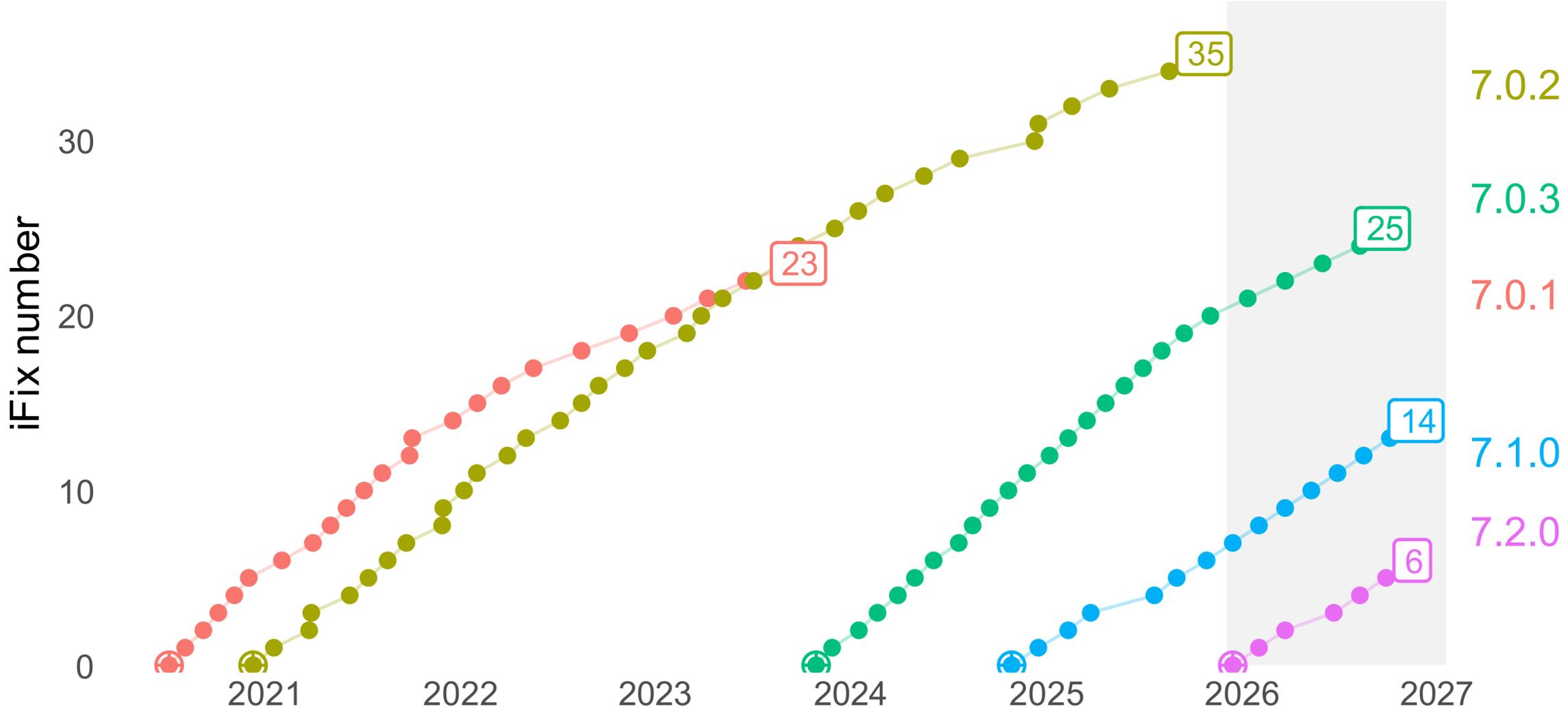March 2026

IBM Engineering

IBM ELM V7.0, 7.1, and 7.2 deliveries

ELM V7 releases actual and projected

108 releases for 5 versions
Average of 17 releases yearly
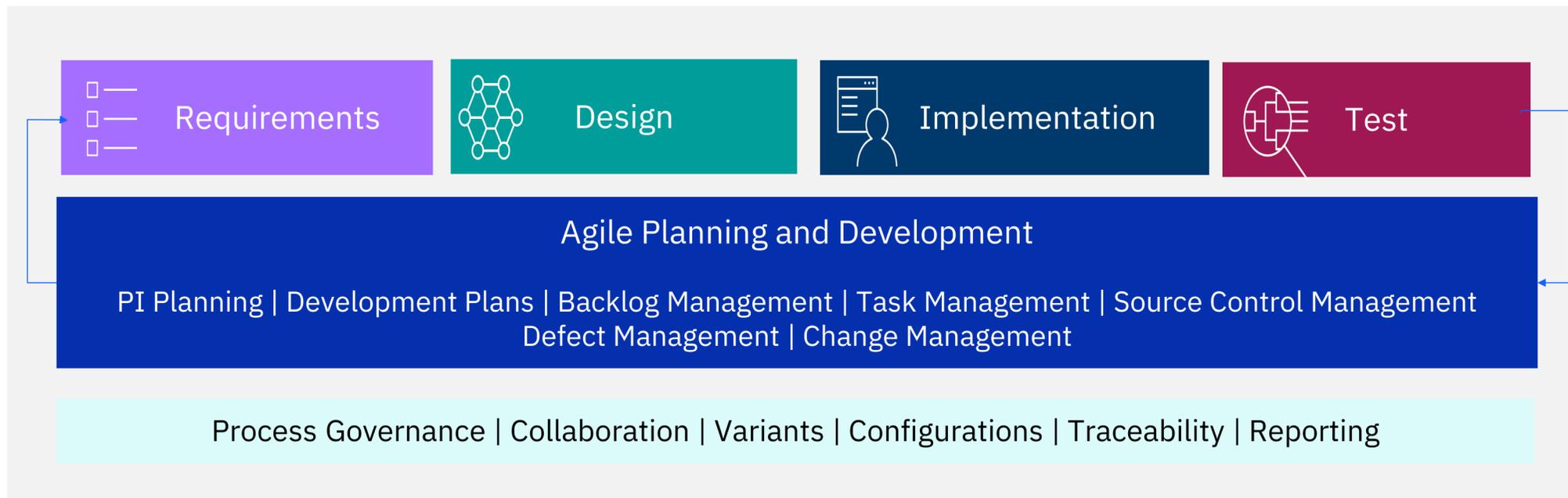2020-07-07 to 2026-11-27 (as of 2025-12-08)

Plot: Daniel Moul. Data: Viral Panchal et al.

IBM Engineering Lifecycle Management
A leading platform for today's complex software and systems engineering

For teams developing systems, things, or services that are mission, business or safety-critical, IBM Engineering Lifecycle Management (ELM) is your engineering backbone.

Requirements	Design	Implementation	Test

Agile Planning and Development

PI Planning | Development Plans | Backlog Management | Task Management | Source Control Management
Defect Management | Change Management

Process Governance | Collaboration | Variants | Configurations | Traceability | Reporting

Digital Threads	Agile Engineering	Model-Based Systems Engineering	Configuration Management	Reporting and Compliance
Manage links and dependencies among requirements, models, work, code, builds, tests, and defects	Facilitate planning to reduce time to market, increase collaboration, and accelerate work	Design, analyse, enhance, and validate complex systems and software by leveraging SysML and UML	Define, change, and reuse of engineering artifacts in the context of the product under design or production	Automate gathering and presentation of progress, status, and deliverables for regulatory compliance

Industry leaders are among our clients
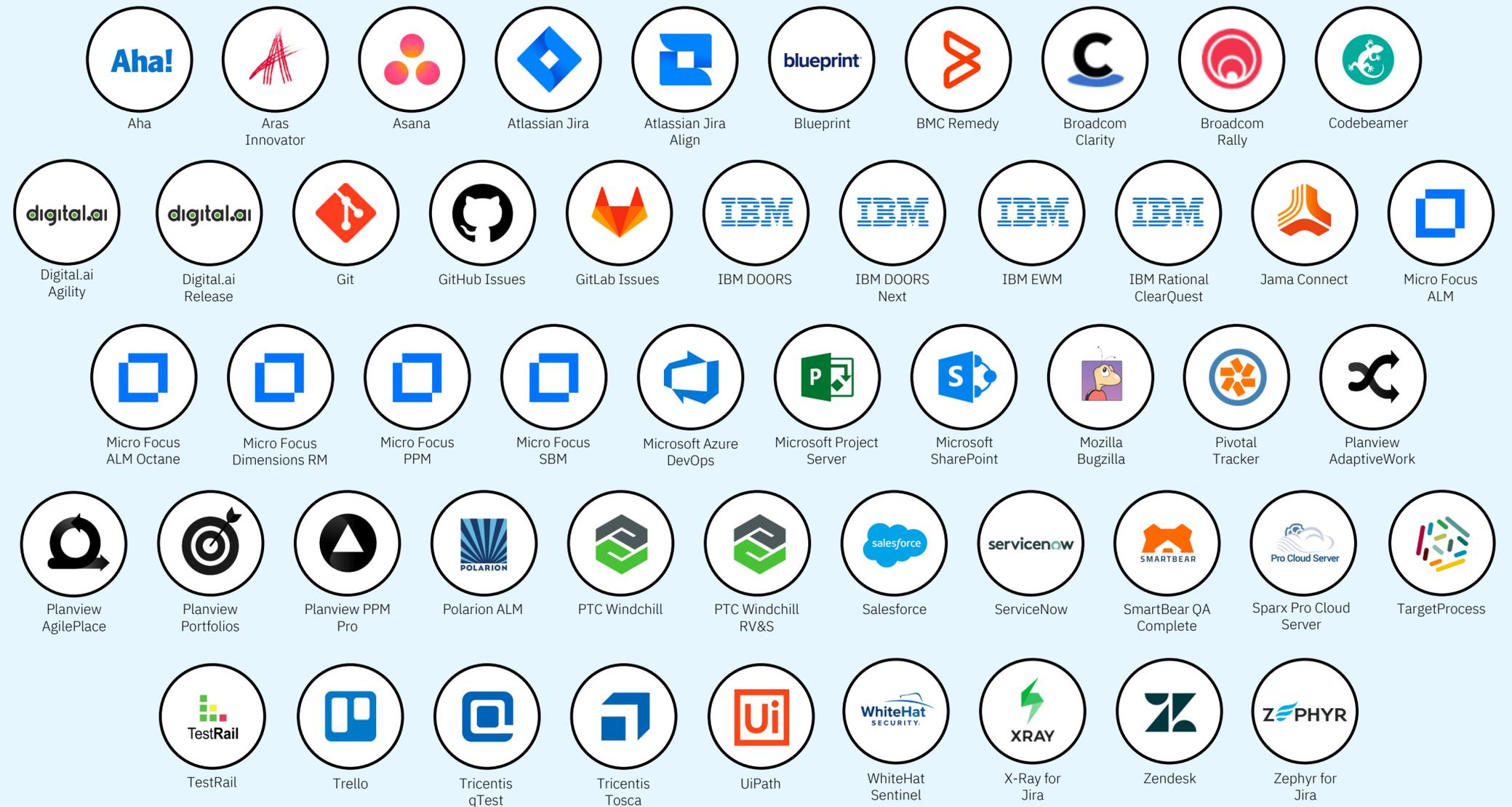
10 out of 10 largest automotive OEM's and tier 1 suppliers

10 out of 10 largest aerospace and defense companies

Government institutions in more than 40 countries

Drive engineering efficiencies
through use of AI agents

Agent extensibility #1: Write your own agents, making use of MCP to access ELM tools and data.

Agent extensibility #2: Agents can use ELM data in data scopes that are relevant to you (global config, user permission context, etc.)

Agent extensibility #3: Use your preferred models and model runtimes for LLM inferencing.

New Work Item compose/decompose agent: Create features, tasks, defects, etc. faster and with better quality.

New Duplicate and conflicting requirements agent: Reduce ambiguities in large requirement sets that lead to late defects. Find existing assets that can be reused.

IBM Engineering Integration Hub: Supported Connectors

Engineering Workflow Management

DOORS Next

DOORS

→

Aha	Aras Innovator	Asana
Atlassian Jira	Atlassian Jira Align	Blueprint
BMC Remedy	Broadcom Clarity	Broadcom Rally
Codebeamer		

Aha · Aras Innovator · Asana · Atlassian Jira · Atlassian Jira Align · Blueprint · BMC Remedy · Broadcom Clarity · Broadcom Rally · Codebeamer

Digital.ai Agility · Digital.ai Release · Git · GitHub Issues · GitLab Issues · IBM DOORS · IBM DOORS Next · IBM EWM · IBM Rational ClearQuest · Jama Connect · Micro Focus ALM

Micro Focus ALM Octane · Micro Focus Dimensions RM · Micro Focus PPM · Micro Focus SBM · Microsoft Azure DevOps · Microsoft Project Server · Microsoft SharePoint · Mozilla Bugzilla · Pivotal Tracker · Planview AdaptiveWork

Planview AgilePlace · Planview Portfolios · Planview PPM Pro · Polarion ALM · PTC Windchill · PTC Windchill RV&S · Salesforce · ServiceNow · SmartBear QA Complete · Sparx Pro Cloud Server · TargetProcess

TestRail · Trello · Tricentis qTest · Tricentis Tosca · UiPath · WhiteHat Sentinel · X-Ray for Jira · Zendesk · Zephyr for Jira

Rhapsody SE at a glance

> "Systems engineering must
>
> *guide and orchestrate*
> *the overall technical effort*
> including
> *hardware, software, test, and*
> *specialty engineering*
> to ensure the solution
> satisfies its stakeholder
> needs and expectations."
>
> *INCOSE, 2035 SE Vision*

1 What is it?

- Systems Engineering solution
- Supporting SysML v2
- Modern, cloud/web native experience

2 Who is it for?

- For Systems Engineering practitioners
- For Process experts, such as members of Tools & Methods groups

3 Modern deployment

- Containerized deployment architecture, allowing both:
  - Docker-based simplicity
  - Kubernetes Operator with seamless scalability.
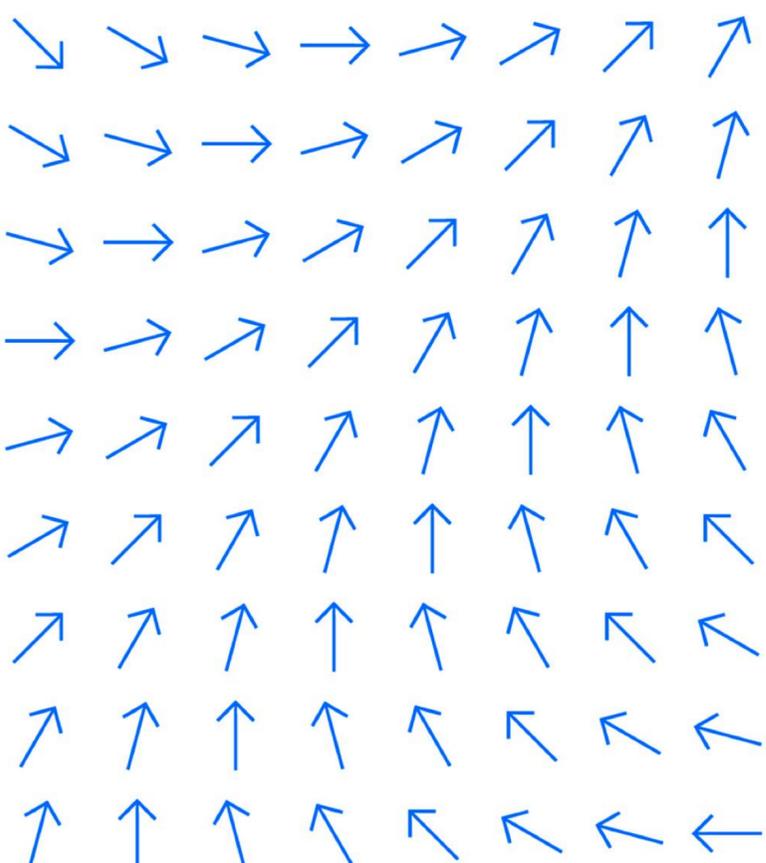- Quarterly releases

4 Modeling process

- Harmony v2: OOTB modeling process leveraging SysML v2
- Harmony IQ: Visual modeling process customization and guidance for practitioners

5 Lifecycle integrations

- ELM Integration
- Model Based Software handoff
- Teamcenter PLM (via Siemens)

6 Openness & extensibility

- SysML v2 APIs
- OSLC Support
- Client Extension SDK
- DSL support

2025

IBM ELM deliveries in 2025

Rhapsody 10.0.2
May

ELM HC 1.0
Apr

ELM 7.1 SR1
July

Engineering AI Hub 1.0
Oct

Engineering AI Hub 1.1
Dec

ELM 7.2
Dec

2025 ——————————————————————————————————— 2025

DOORS 9.7.2.10
July

Common Licensing 9.0.0.2
Aug

Integration Hub 7.1
Sep

Quarterly: Rhapsody Systems Engineering releases
Regularly: ELM iFixes + ELM on Hybrid Cloud releases

ELM 2025

building on IBM leadership in…
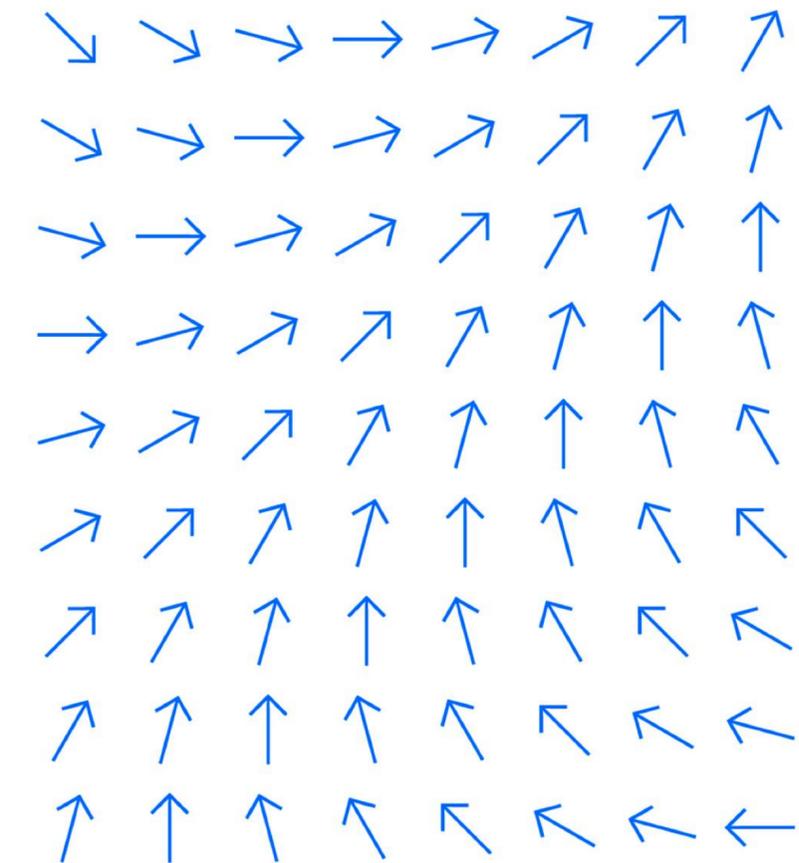
1

Secure deployments and software supply chain

Trustworthy deployments of IBM ELM products that help you meet government and industry ITSec requirements

DOORS 9: modern authentication using OIDC + remove dependency on Rational Directory Server [beta]

Updates to components, specified operating environment, and integrations

Encrypted license client/server data flow

2

User Productivity

Practitioners and administrators can work faster with less overhead and fewer errors, including automations using AI

DOORS Next advanced filtering part 2: enumerating attributes

DOORS Next cross-server link constraints

Quick Planner improvements: use custom attributes

Work item editor improvements

Edit Rhapsody 10 models on multiple monitors; single view: reqs + model; comment models in your web browser; welcome page refresh

AI-powered automations, starting with requirements ⊕

3

Operating at Scale

Work with ever larger data and user scale, and keep current with the specific operating environment and integrations

ELM on Hybrid Cloud: containers and operator for OpenShift and K8s ⊕
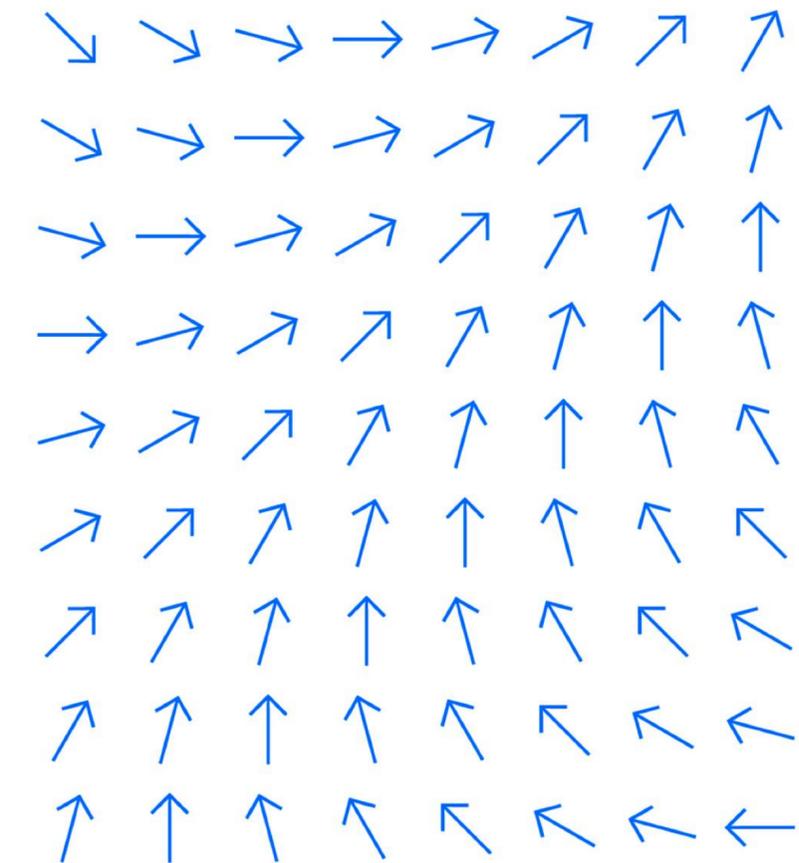
DOORS Next APIs for automating type system management

Improve performance loading and using large Rhapsody 10 models, including progress bar

Other performance and scale improvements

ELM 2025

building on IBM leadership in...

4 Reporting

Automate gathering and presenting project and program-wide status information and program deliverables

Updated user experience when viewing Report Builder reports

Custom historical metrics with LQE rs, Report Builder, ENI

Efficiently use LQE rs data in separate data lake

5 Change and configuration management

Define, review, and change engineering artifacts in the context of the larger product under design or development

ETM create baselines in the past

VS Code lightweight client for developers using EWM SCM

Eclipse client UX optimizations

6 Digital transformation

Optimize the transition from mechanical / electrical to software-defined products and systems. Includes Digital Thread and Model-Based Systems Engineering.

DOORS Next cross-server link constraints simplify following a defined digital thread information model

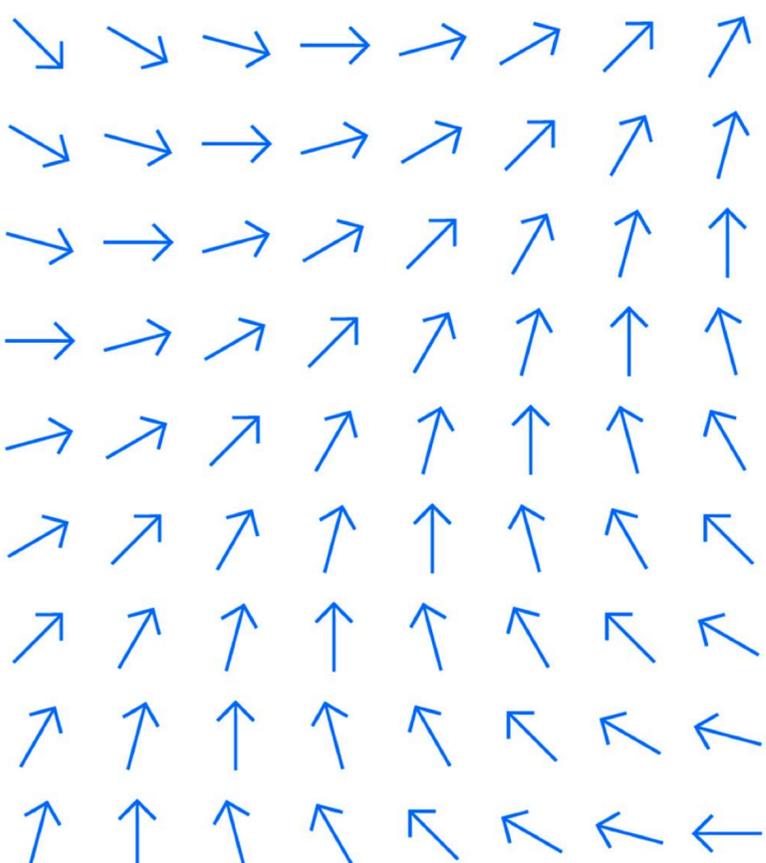Simplified linking: drag-and-drop from DOORS Next, ETM, EWM to Rhapsody 10 client

Rhapsody SE rapid evolution

Industry-specific productivity aids for Rhapsody 10 users: M2M transformations, generate code in current C++ language versions

Engineering Integration Hub: ELM 7.1 compatibility release

2026

IBM ELM deliveries in 2026

Rhapsody
10.0.3
Mar

EWM
Extension for
VS Code 1.1
Jun

EWM Extension
for VS Code
1.next
Dec

ELM 7.next
Nov

ELM on HC
2.0
Mar

Integration
Hub 7.2
Jun

Common
Licensing
9.next
Aug

Integration
Hub 7.next
Oct

DOORS
9.7.2.11
Jan

DOORS
9.7.2.12
Jun

DOORS
9.next
Dec
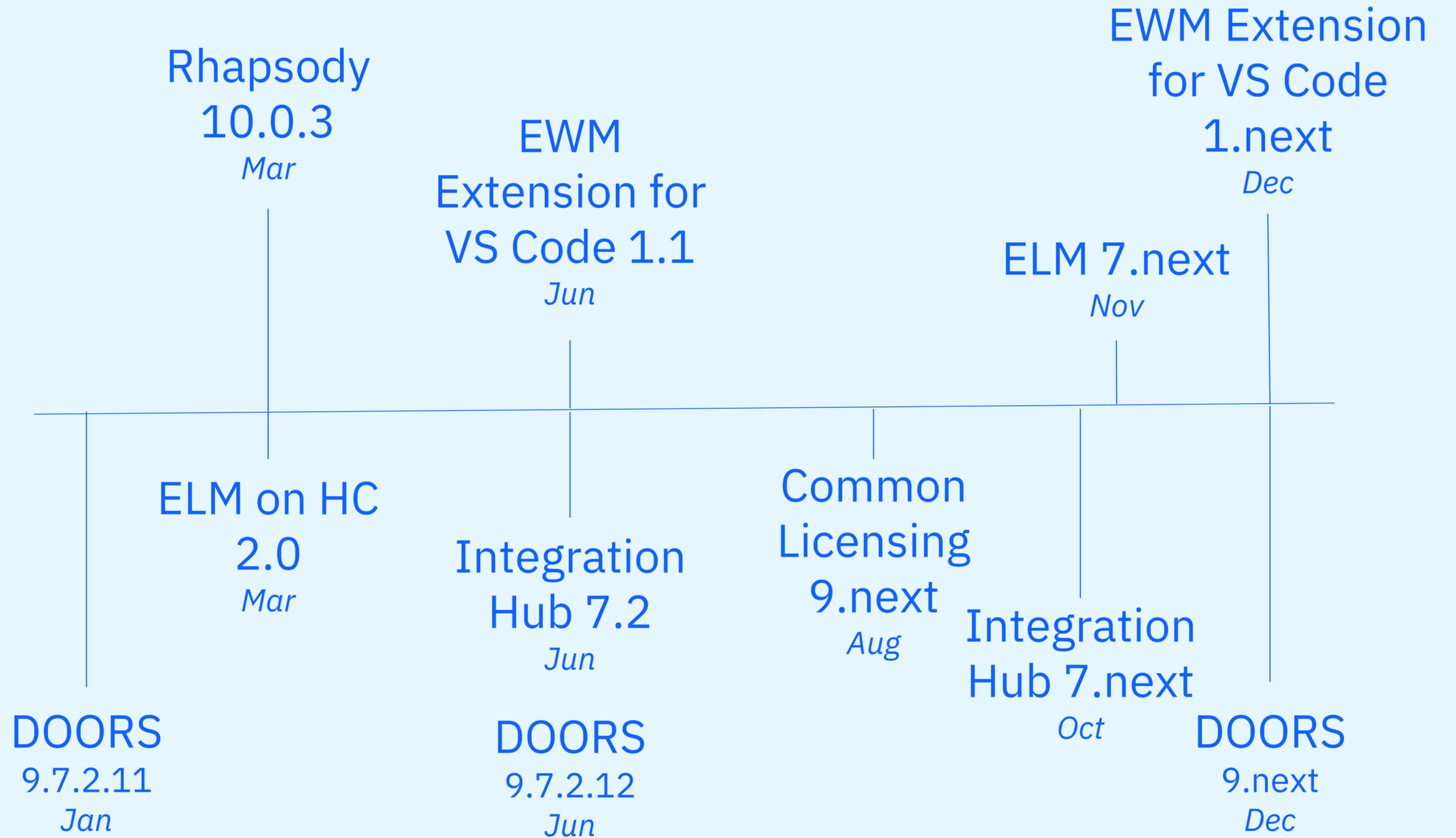
Quarterly: Rhapsody Systems Engineering and Engineering AI Hub releases
Regularly: ELM iFixes and ELM on Hybrid Cloud releases

ELM 2026 outlook

building on IBM leadership in...
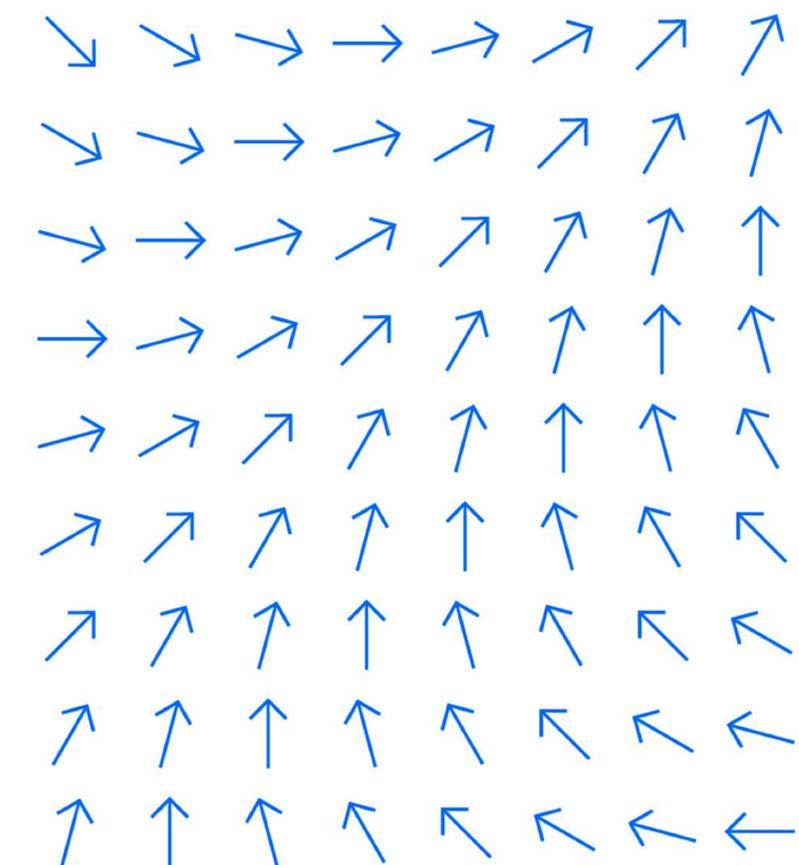
1
AI-accelerated engineering

Automation through AI agents

Agent extensibility
– Access ELM tools and data through MCP and Agent2Agent protocol
– Agents can use ELM data in data scopes that are relevant to you (global config, user permission context, etc.)
– Use your preferred models and model runtimes for LLM inferencing

New agents
– Work Item compose/decompose agent: create features, tasks, defects, etc. faster and with better quality.
– Duplicate and conflicting requirements agent: reduce ambiguities in large requirement sets that lead to late defects. Find existing assets that can be reused.

2
Practitioner productivity

Practitioners can work faster with less overhead and fewer opportunities for error

Requirements
– Read access control
– Rich text in attributes

Test Management
– Read access control

Tracking and Planning
– Planning improvements: scoping, link types beyond parent-child
– Editing: check boxes, markdown

3
Operating securely at scale

Trustworthy deployments at ever larger data and user scale; keeping current on SW stack

ELM on Hybrid Cloud
– Selective ELM app install
– Install more than one of same app
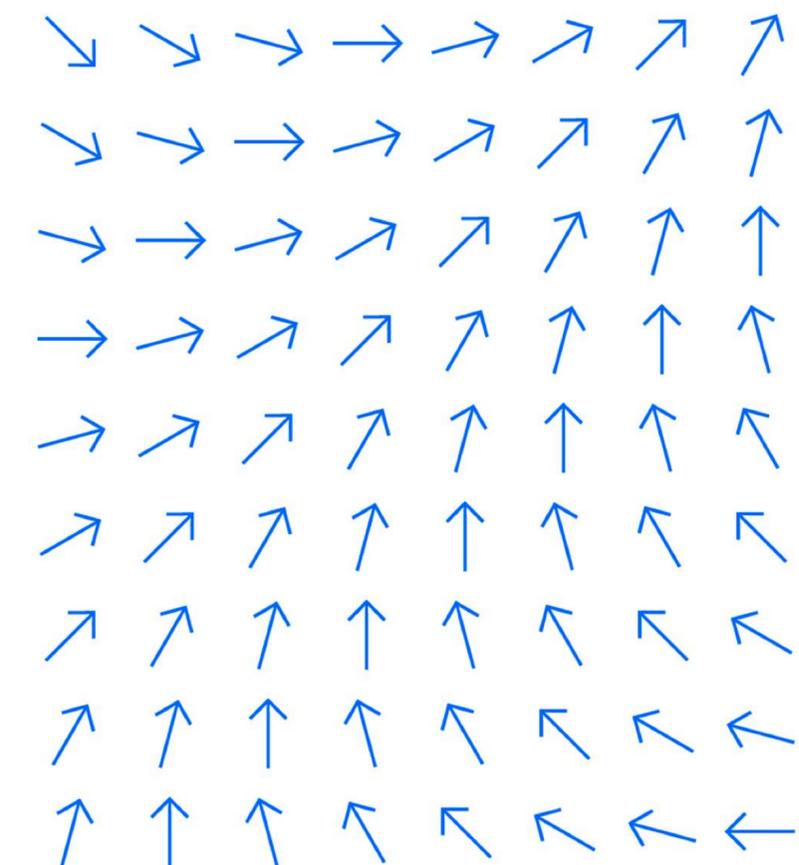– Migrate some classes of existing deployments

API rate limiting for server resiliency

DOORS 9 authentication via ODIC; remove dependency on Rational Directory Server

Selected candidate features – subject to change

ELM 2026 outlook

building on IBM leadership in…

4 Reporting

Automate gathering and presenting project and program-wide status information and program deliverables

UX refresh: creating reports

5 Change and configuration management

Define, review, and change engineering artifacts in the context of the larger product under design or development

Requirement change set improvements

EWM Extension for VS Code enhancements

Tekton for CI/CD when using EWM SCM

Eclipse UX: SCM filter/search improvements, add version changes to pending change and history view

SCM restricting movement of snapshots from one team stream to another (quality + security)

6 Digital transformation

Optimize the transition from mechanical / electrical to software-defined products and systems. Includes digital continuity / digital thread and model-based systems and software engineering.

Rhapsody SE
– Reporting and doc generation
– Product Line Engineering

ReqIF enhancements, e.g., reuse of SPEC-OBJECTs

Selected candidate features – subject to change

Thank you