

Deep Dive Webinar

EXPLORING THE CAPABILITIES OF RELIASOFT CLOUD

Sam Eisenberg – Product Manager
Zack Graves – Application Engineer

Practicalities



Please type any questions you have into the Q&A chat box.



Today's presentation will be e-mailed to you



This webinar will be recorded



For any additional questions, feel free to contact us at: info@hbkworld.com



Deep Dive Webinar: Agenda

1. Overview of ReliaSoft Cloud
2. Powerful dashboards cut through noise
3. Secure infrastructure safeguards data
4. Functional interface for ease of use
5. AI assists brainstorming and leverages lessons learned
6. Conclusion and Q&A

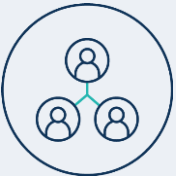


ReliaSoft Cloud – Overview



▲ Fully web-based and Software-as-a-Service (SaaS) platform

- Users access via web browser (no local installs)
- Secure global deployments with database and web servers managed by HBK (no hardware requirements or local IT support)



▲ Scalable solutions for a global user base

- Enables many users over a geographically dispersed workforce
- Starts at just 10 users / 100 viewers and scales up to thousands of users and unlimited viewers



▲ A proven industry leader in FMEA and reliability

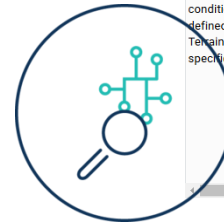
- Benefit from the expertise of a trusted partner dedicated to supporting and advancing reliability methods to enhance your engineering processes

ReliaSoft by
HBK
HOTTINGER BRÜEL & KJÆR



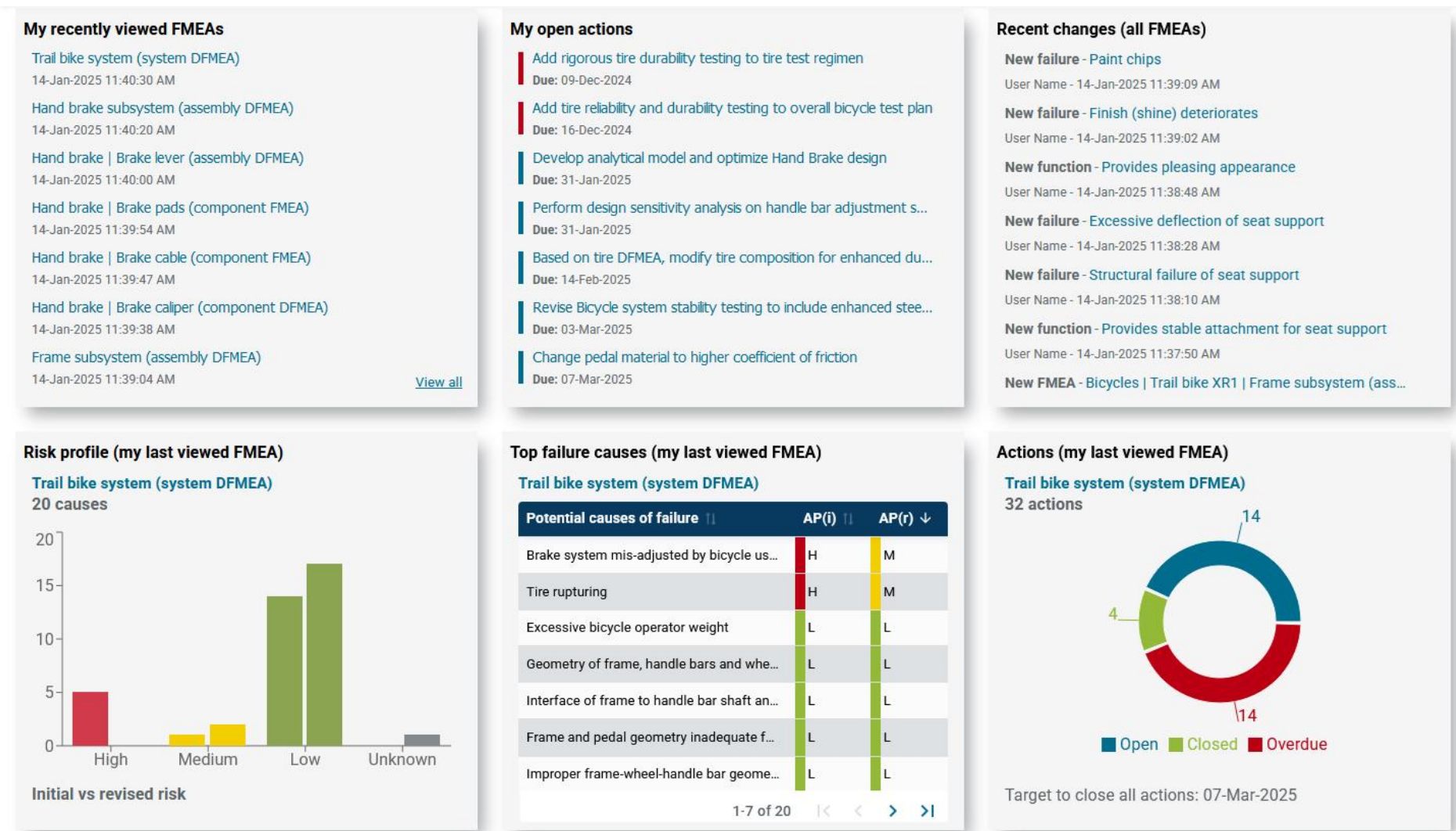
ReliaSoft Cloud – FMEA

- Multiple FMEA types per major published standards, with flexibility to customize for your specific needs
- Leverage knowledge across FMEAs, along with brainstorming assistance powered by AI
- Dashboards to drive decisions and track progress on design improvements and risk reduction
- SaaS enables regular updates as new features and enhancements are added
- Annual subscription pricing



Powerful Dashboards

Dashboards cut through noise and data clutter



Demo

Secure Infrastructure

Is my data secure in ReliaSoft Cloud?

- ▲ We prioritize the security and privacy of our customers' data
- ▲ ReliaSoft Cloud leverages Microsoft Azure's secure infrastructure, ensuring robust protection – including TLS encryption for data transmission and physical segregation of customer data
- ▲ To comply with global data protection standards, we align with GDPR requirements, and HBK is actively working towards ISO 27001 compliance, aiming for certification to further validate our commitment to security and data privacy



Functional Interface

Streamlined web interface is easy to use

- Flexibility of utilizing the FMEA workflow (worksheet or tree) that works best for each individual
- Drop-downs and field names configured to your nomenclature
- Easy to implement linkages for Actions
- Ability to define and utilize multiple FMEA types / formats

The screenshot displays the ReliaSoft Cloud FMEA interface. The top navigation bar includes the 'ReliaSoft Cloud' logo, 'FMEAs' tab, and a user profile dropdown. The main title is 'AIAG-4 Design - Bicycles | Trail bike XR1 | Trail bike (system DFMEA)'. Below the title, there are tabs for 'WORKSHEET', 'TREE', and 'HEADER'. The 'WORKSHEET' tab is active, showing a table with columns: Functions, Potential failure modes, Potential effects of failure, S(I), Class, Potential causes of failure, O(I), Control type, Current design controls, D(I), RPN(I), AP(I), and Recommended actions. The table contains one row of data. To the right of the table, there is a 'Cause' panel with a dropdown for 'Class' (set to 'KLD - Key leading'), a text area for 'Potential causes of failure' (containing 'Insufficient friction delivered by hand brake subsystem between brake pads and wheels during heavy rain conditions'), and several input fields for S(I), O(I), D(I), RPN(I), and AP(I). Below the table, there is an 'Action' panel with a dropdown for 'Recommended actions' (set to 'DFMEA on All-Terrain Hand Brake subsystem'), a dropdown for 'Responsibility' (set to 'User Name'), a text field for 'Planned completion date' (set to '24-Oct-2024'), a text field for 'Actual completion date' (set to '20-Oct-2024'), and a dropdown for 'Action state' (set to 'Closed'). At the bottom right, there are 'Discard' and 'Save' buttons.

Functions	Potential failure modes	Potential effects of failure	S(I)	Class	Potential causes of failure	O(I)	Control type	Current design controls	D(I)	RPN(I)	AP(I)	Recommended actions
Bicycle must provide safe and reliable transportation, including safe stopping distances and safe operation under all customer usage conditions as defined in the All-Terrain technical specification	Does not stop in required distance	User dissatisfied with stopping distance (7,7) Potential accident or injury without warning (10,10)	10	KLD	Insufficient friction delivered by hand brake subsystem between brake pads and wheels during heavy rain conditions.	5	Det Prev	All-Terrain bicycle stopping test #ABCD All-Terrain braking system design guide (doc # 123)	5	250	H	DFMEA on All-Terrain Hand Brake subsystem Improve stopping test by including all weather conditions Develop analytical model and optimize Hand Brake design Add rigorous tire durability testing to tire test regimen

Demo

AI Assistance

AI assistance for performing FMEAs

- ▲ Use AI assistance when adding new FMEA records
 - Generated by Azure OpenAI Service model GPT-4o using an LLM + RAG approach
 - Prioritizes descriptions from similar FMEAs in your site when applicable
- ▲ Speeds up the analysis process
- ▲ Facilitates consistency across similar components and failure modes
- ▲ Suggests potential risks or mitigation strategies the team may not have considered

AIAG-4 Design - Pump Design - Initial FMEA

WORKSHEET TREE HEADER

Functions	Requirements	Potential failure modes	Potential effects of failure	S(i)	C
Transmit fluid at a rate of 5 gpm +/- 1.5 GPM.					

+ Add function
+ Add requirement
+ Add failure
+ AI assist
✂ Cut
📄 Copy

+ Add functions
+ Add requirements
+ Add failures

AI assist - failures

- ☒ Fluid flow rate exceeds 6.5 gpm
- ☒ Fluid flow rate drops below 3.5 gpm
- ☐ Valve leaks causing flow rate inaccuracies
- ☐ Pump failure leading to halted fluid transmission
- ☐ Sensor malfunction results in incorrect flow measurement
- ☐ Fluid overheats due to excessive flow speed
- ☐ Flow meter provides inaccurate readings leading to operational inefficiency
- ☐ Clogging of fluid pathway restricts proper flow
- ☐ Rupture or leakage in fluid transmission line
- ☐ Pressure irregularities affecting fluid dynamics

Add

Functions	Requirements	Potential failure modes
Transmit fluid at a rate of 5 gpm +/- 1.5 GPM.		Fluid flow rate exceeds 6.5 gpm Fluid flow rate drops below 3.5 gpm

Demo

Conclusion

ReliaSoft Cloud: Centralized FMEA Management

- ▲ ReliaSoft Cloud is an FMEA platform built for collaboration, ease of use, and powerful insights
- ▲ Dashboards cut through noise and data clutter to deliver clear insights and keep engineers on top of their tasks
- ▲ SaaS deployment eases access and IT burden while providing robust data security
- ▲ The functional interface allows engineering teams to quickly access, edit, and collaborate on FMEAs
- ▲ AI assistance enhances brainstorming and ensures consideration of lessons learned

Initial release – available now

- ▲ With the initial release, you can:
 - Manage all the FMEAs in your site
 - Create new FMEAs or import from Excel®
 - View and edit FMEAs in complementary “worksheet” and “tree” views
 - Utilize AI-powered brainstorming assistance
 - View dashboards on your personal home page
 - Manage and customize FMEA types
 - Manage active users and permissions
- ▲ SaaS enables regular updates as new features and enhancements are added

For more information

Visit [hbkworld.com](https://www.hbkworld.com) or contact an HBK representative

The screenshot displays the ReliaSoft Cloud web application. The top navigation bar includes a search field, language selection (English), and links for HBMSHOP, Training, Resources, and user profile. The main header features the HBK logo and navigation links for Products, Knowledge, Solutions, Services & Support, About, and Contact. The breadcrumb trail indicates the path: PRODUCTS > RELIASOFT - RELIABILITY > RELIASOFT CLOUD. The main content area is titled 'ReliaSoft Cloud' and describes it as a web-based SaaS solution for centralized FMEA management. Below the description are two buttons: 'REQUEST A TRIAL' and 'REQUEST A QUOTE'. The right sidebar contains several widgets: 'My recently viewed FMEAs' with a list of recent projects; 'My open actions' with a list of tasks; 'Recent changes (all FMEAs)' with a list of updates; 'Risk profile (my last viewed FMEA)' with a bar chart showing risk levels; 'Top failure causes (my last viewed FMEA)' with a table of failure modes; and 'Actions (my last viewed FMEA)' with a donut chart showing the status of actions (Open, Closed, Overdue).

<https://www.hbkworld.com/en/products/software/reliability/reliasoft-cloud>

Q&A