

INCOSE Webinar 163 Questions and Answers

#	Question	Asker Name	Answer	Question Time	Answered Time
1	There will be a few people joining specifically to see the discussion on V&V, so I am hoping we can emphasize this topic a bit	Kiffin Bryan	Will cover this	10/19/2022 7:59	10/19/2022 8:00
2	Hello, how do we get the first 2 Webinars of this series?	Kenneth Venzant	live answered	10/19/2022 8:06	10/19/2022 8:16
3	Hello, how do we get the first 2 Webinars of this series?	Kenneth Venzant	Here: #158 and 159	10/19/2022 8:06	10/19/2022 8:23
4	For digital standards to work, we need to standardize the data format to which all software tools can use to import the standards. Am I thinking correctly?	Paul Heininger	Very good point. I believe that ReqIF is the best format. But beyond that, we need to think differently about how we author standards. I actually have pulled together some great information we have learned from our digitization efforts on How to Write a Digital-Ready Standard. Looking to present this at various conferences to start educating others on how to write standards that are more machine-readable. Ultimately, we need tools to author digital standards directly. But until then, AI models are the best option.	10/19/2022 8:10	10/19/2022 8:13
5	How do I get access to webinar 1 and 2?	Steve Kang	Here: #158 and 159	10/19/2022 8:10	10/19/2022 8:17
6	@Leslie seems to be talking about standards for mechanical parts. Am I thinking correctly? What about digitizing a standard such as ISO 9001?	Paul Heininger	It is on our roadmap. We are looking to digitize a wide range of standards, from parts, materials, processes, and quality standards.	10/19/2022 8:13	10/19/2022 8:14
7	Could you please briefly tell us about different tools used to digitalize standards? Does that mean the standards are in databases and also linked all together for easy traceability?	Damien Roeder	Yes. Check out my first webinar, and we can follow up with more information. Here: #158 and 159	10/19/2022 8:15	10/19/2022 8:18
8	Does "3DExperience platform" in your concept include tools like Cameo (which also is Dassault and focuses on system design and software design)?	Neal London	He's demonstrating that now, and part 2 of the webinar was solely focused on that.	10/19/2022 8:16	10/19/2022 8:26
9	On top of design simulable design, what about simulable requirements for RVAL (Requirement validation vs operational needs), DVER (Design Verification vs Validated requirements) and PVER (Product Verification vs Validated requirements)	pascal paper		10/19/2022 8:22	
10	Thanks Leslie, I had the same question about the tools used to digitize the standards.	Julia Springer	Sure Julia! I would be happy to discuss more with you.	10/19/2022 8:23	10/19/2022 8:33
11	Does this sync with IHS?	AManda Altrichter	If you are referring to the IHS Engineering Workbench, they do not yet offer digital standards. However, we are in talks with them to offer this in the future.	10/19/2022 8:27	10/19/2022 8:32
12	Are Standards Development Organizations moving to issue their own digitized standards, or do they typically rely upon others to digitize their standards? How does the answer impact standards acquisition dynamics, like cost and rights to use.?	Anonymous Attendee	We are working to digitize our standards, working with technology partners. I meet frequently with other SDOs (ASTM, ASME, etc.) to share information. We all understand that your designs cannot be done with standards from any one SDO. So, we all need to work together. I have been sharing our lessons learned on how to write standards that are in a more machine-readable format so that it can help other SDOs with their digitization efforts as well. SAE may also help other SDOs digitize their standards using our AI model.	10/19/2022 8:28	10/19/2022 8:31
13	Thank you Saulius! How much of the requirements visible in your 3dx demo are imported automatically vs manually entered?	Daniel Schaffer		10/19/2022 8:30	
14	How do you tackle with big models, overburdened with a lot of elements and relations? I found it difficult to support such large models and we eventually migrated to pseudo code. Can we write sysml code, not create diagrams?	Aleksandr Turkhanov	live answered	10/19/2022 8:31	10/19/2022 8:32
15	How do you tackle with big models, overburdened with a lot of elements and relations? I found it difficult to support such large models and we eventually migrated to pseudo code. Can we write sysml code, not create diagrams?	Aleksandr Turkhanov	Sounds like a methodology issue. Break the model up, federated architectures are the best way to manage complexity while enabling reuse. However, SysML "code" is something coming with SysML V2	10/19/2022 8:31	10/19/2022 8:33
16	How do you assess the model itself for its accuracy to the system hardware and software?	Matt McGrory	Depends on which kind of model to which you're referring. Within Cameo, see pt 2 of this series on the digitization of requirements where we dip into how we leverage the MBSE tool's simulation capabilities. If referring to the overarching distributed "digital model", there is a nice tool through 3DS named Process Composer that allows integration and verification throughout the entire data model, traced through multiple tools, if not on the 3DS platform, check out ModelCenter by Ansys, which enables one to integrate simulations across multiple external tools	10/19/2022 8:32	10/19/2022 8:35
17	I have Cameo 2021x R2, does 3D experience available with my license, or should be purchased separately?	Mohammed Albayati		10/19/2022 8:36	
18	Is there a way to connect the digitized standard information with live operations data from system instances in the field?	Anonymous Attendee	When we digitize a standard, we store it in a database. Our system also supports API integrations, so this could be possible.	10/19/2022 8:37	10/19/2022 8:40
19	We are new to MBSE as a company working in the flight simulator industry. Working on simulators with a large amount of individually modelled components, and very complex requirements documents, is there a way to reduce the initial complexity of data import into using a tool like cameo? The large amount of data we would need to import seems like a barrier to entry for companies that are already established in their processes.	Nick Johnson	Interesting, perhaps we should discuss this one in more detail offline with an NDA to come up with a robust strategy. Unfortunately, every organization has different internal standards for their definition of requirements, as such there really is no one-size-fits all, but in most cases a custom process can be created to automate the process successfully.	10/19/2022 8:38	10/19/2022 8:40
20	These questions and answers are very interesting. Can we receive a transcript, so that I don't have to save an ugly copy/paste?	Joe Stern		10/19/2022 8:41	
21	Does the capability being demonstrated require that users have access permissions to each native tool or only to the compiled dashboard? Does that impact what they can see/modify?	Kimberly Nunn		10/19/2022 8:41	
22	Where does the traceability percentages come from?	Steve Kang		10/19/2022 8:41	
23	Saulius, thanks for the demo and presentation. How are the requirements generated from the SAE standard (which is with lot of text/sentences).	Satya Kokkula	We currently use an AI model to "read" and parse our standards into requirements stored in a database. Ultimately, the industry will need a tool to create digital standards directly. We are working with technology partners to discuss this. Until then, I have been working to educate people on how to write standards in a format that is more machine-readable.	10/19/2022 8:42	10/19/2022 8:47
24	do you plan to model the semantics within requirements, such as conditions such as shown in requirement 3.3.3.1 "...except welded and withdrawn corrosion	Mark Dahl		10/19/2022 8:42	
25	Saulius, I saw manufacturing model in one of your slides, is it part of 3D experience, CATIA, or an external app?	Mohammed Albayati		10/19/2022 8:42	
26	My question is certainly not in the scope of this conference focused on physical product and not functional product view	pascal paper		10/19/2022 8:43	
27	Reqts orgs always create their own stds which are different than each other like IEEE, IEC, INCOSE, etc. Since complex systems will contain parts made to different stds, how do we envision verification working from different orgs without custom coding every verification?	Matt McGrory	There is a cross-functional team of people from different standards organizations that are focused on this. We understand that we need to work together so that digital standards from different organizations can be used together without custom coding.	10/19/2022 8:44	10/19/2022 8:50
28	Leslie -- does the AI parsing includes the MoSEC standard -	Kenneth Venzant	It is a natural language processing model that is used to identify tables, diagrams, and individual requirements. We are working with AI partners to refine a model and testing it with standards from different organizations so that they work together. I believe the output of digital standards is best to meet the ReqIF format. This will allow requirements from digital standards to be included in requirements tracking systems with all your other requirements.	10/19/2022 8:49	10/19/2022 8:52
29	How accurate is the AI "reading" process?	AManda Altrichter	It is around 98% accurate. However, we are currently using a double validation process done by engineers for each standard until the model can be used without the need for manual validation.	10/19/2022 8:49	10/19/2022 8:53
30	My organization is in the process of purchasing 3DS now. Very exciting to see this.	Steve Kang		10/19/2022 8:50	
31	I have to jump to another meeting. Thank you very much for all the great information. I'll check out the other demos Leslie. I appreciate your help.	Julia Springer		10/19/2022 8:51	

32	How do we assess predictive metrics like reliability in these models that are not solidified until a period of performance has been witnessed and data acquisitioned?	Matt McGrory		10/19/2022 8:51	
33	Since when 3D experience users have access to the V&V planning and execution capabilities?	Anonymous Attendee		10/19/2022 8:53	
34	thanks	Satya Kokkula		10/19/2022 8:55	
35	Thank you!	Kenneth Venzant		10/19/2022 8:55	
36	we are starting to implement the OMG standard UML Testing Profile 2.1 in Cameo/NoMagic to model test architectures (test cases, test procedures, test execution schedules, test configurations, capture test logs). I saw that the 3dx suite had representations of these similar things but their object ontology is slightly different (i think they were called test plans, test case, test executor/execution, test results). Given OMG is sort of a defacto for object metamodel definitions does 3DX envision incorporation of a common ontology across the various tools in the suite? Such that I dont go to one tool and the artifact is called "Test Plan" then go Cameo and its called Test Execution Schedule	Tyler Jenkins		10/19/2022 8:55	
37	Leslie McKay who are these orgs and how do we get the status on the stds and where they are at?	Matt McGrory	I am working with ASTM, ASME, ISO, IEEE, ANSI, and others. I can follow up with you if you would like to learn more.	10/19/2022 8:55	10/19/2022 8:57
38	Is there a marketplace of digitized standards?	Anonymous Attendee	SAE offers digital standards through OnQue. There is not a marketplace as of yet.	10/19/2022 8:56	10/19/2022 8:58
39	sorry just one last question :) above^	Tyler Jenkins		10/19/2022 8:57	
40	yes please do	Matt McGrory	Will do!	10/19/2022 8:58	10/19/2022 8:58