

QVscribe for Polarion Walkthrough

Before starting the walkthrough

Make sure you have downloaded, installed and logged into QVscribe for Polarion before starting this walkthrough. You can refer to our client portal for more information on installation.

Chrome: https://qvscribe.com/knowledge/qvscribe-polarion-user-set-up

Microsoft Edge: <u>https://qvscribe.com/knowledge/qvscribe-for-polarion-installation-edge</u>

Start using QVscribe

Once you have logged in, select the QVscribe icon at the top of any Live Doc View or Table view. This will open the QVscribe Summary Dashboard.

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•		
ID	Title Status Prio Assignee	(s) Initial Esti Remaining Created	
🗢 🗹 🎼 DP-715	[EC-LMR-HSI-200] Shock Exposure: When up 🖉 Draft 🛛 😑 50.0	2020-10-14 11:	·
😔 🗌 🍘 DP-714	[EC-LMR-HSI-160] Dust Kick-up: The Lunar E) 🖉 Draft 🛛 📃 50.0	2020-10-14 11:	
😔 🗌 🏟 DP-713	Rationale: Rover should be compatible with s 🖉 Draft 🛛 😑 50.0	2020-10-14 11:	
😔 🗌 🍘 DP-712	[EC-LMR-HSI-120] Crew Contact Loads: If apr 🖉 Draft 🛛 📃 50.0	2020-10-14 11:	
😔 🗌 🍘 DP-711	Rationale: Rover should be compatible with s 🖉 Draft 🛛 😑 50.0	2020-10-14 11:	
an - Ahan 740			

Summary View

The QVscribe Summary Dashboard displays all QVscribe results for the analyzed requirements in the Live Doc or filtered Work Items.

The Summary Dashboard is completely clickable making it easier to navigate to the information that is most important to your workflow.

At the bottom of the Summary Dashboard, you can select the icon to change from the Score Summary (Page 1) to the Score Breakdown (Page 2).

Quality Sc	ore Summa	ary		Quality Warning	S		
SCORE	# OF REQ.	*PERCENTAGE	WHAT SHOULD I DO?	WARNINGS	*PERCENTAGE	# FOUND	Overall Score:
			Very High Risk	Incomplete Sentences	1%	1	
	16	19%	The requirement lacks an imperative, or contains multiple imperatives, and/or contains excessive vague terms. The requirement could also have multiple instances of low-risk	Justification	0%	0	Summary Dashboard
			errors such as excessive continuances, vague phases, etc which have a cumulative effect on the score. Consider rewriting the requirements or separating into multiple concise requirements.	Passive Voice	58%	49	Quality Analysis
			High Risk	Universal Quantifier	11%	9	Term Consistency
	3	4%	Includes multiple instances of vague, subjective, or weak terms, and/or negative imperatives. Replace negative or ambiguous terms with clear and concise terms.	Total # of Guality Warnings			 Unit Consistency Similarity
	20	24%	Medium Risk Includes a single instance of a vague, subjective, or weak term, and/or a single negative imperative. Replace the negative or ambiguous term with a clear and concise term.	Unit Consistency # of Units 3	🕢 Send Feedback		
	0	0%	Low Risk May include excessive use of continuances, and/or No directives. Check the flow and clarity of the requirement.	Term Consistenc	сy		
	45	54%	Very Low Risk Includes clear and unambiguous terminology to express the requirement.	155 • Percentages are based on the occurrences of each quality issue within all analyzed requirements. Note that these percentages are not correlated and will not generally add up to 100% (since some requirements have			
Total # of Require	ments			multiple issues and others ma	ay have none)		

The Score Summary Page (Page 1) displays all analyzed requirements within the Live Doc or filtered Work Items. Each requirement will be categorized according to their level of risk. Selecting any of the score bars will navigate users to the Quality Analysis section filtered for the selected quality score.

The Quality Warnings sections displays the requirements that have issues that QVscribe recommends additional attention or review. Selecting any of the warning categories will navigate users to the Quality Analysis section filtered for the selected Quality Warning.

Summary View

The Score Breakdown Page (Page 2) displays the same requirements from the Score Summary Page broken down by specific quality issues to help you better resolve your requirements problems.

	CURR	ENT: CSProject.pdf	_			av scribe
Quality Score Breakdown			Quality Warnings	5		
QUALITY ISSUES	*PERCENTAGE	# FOUND	WARNINGS	*PERCENTAGE	# FOUND	Overall Score:
Cross-Referencing Pronouns	12%	10	Incomplete Sentences	1%	1	
Excessive Continuances	4%	3	Justification	0%	0	Summary Dashboard
mmeasurable Qualifiers	17%	14	Passive Voice	58%	49	(A) Quality Analysis
Aultiple Imperatives	5%	4	Universal Quantifier	11%	9	Term Consistency
legative Imperatives	1%	1	Universal Quantifier	11%	9	🛞 Unit Consistency
No Directives	N/A	N/A	Total # of Quality Warnings			O Similarity
lo Imperatives	14%	12				Send Feedback
Ion-specific Temporal Word	5%	4	Unit Consistency # of Units			Send reeuback
Optional Escape Clauses	1%	1	3			
Optional Open-Ended Clauses	4%	3	Term Consistency	У		
Superfluous Infinitives	7%	6	155			
Vague Words	5%	4	* Percentages are based on th all analyzed requirements. Not and will not generally add up t	e that these percentage	s are not correlated	
Total # of Requirements			multiple issues and others may	y have none)		
84						Create Report

The Navigation Menu (in yellow) provides easy access to all QVscribe Analyses. Selecting any section from the navigation pane will display the associated analysis views available in the summary view. This section also includes the overall score for all analyzed requirements in the Live Doc or filtered Work Items.

Editing/Authoring in the Summary View

You will have the ability to edit/author requirements within the Summary view. This can be done when you open a requirement within the Quality Analysis.

			CURREI	NT: CSProject.pdf				av scribe
Number of Req 84	uirements	Requirements Shown 84	Filter Requirements No Filter	*		Order of Appeara	ance 👻	Overall Score:
.D.	REQUIREM	IENT				SCORE	WARNING	
CSP-537	If the car	in front of the subject ca	r slows down then the	system will adjust to a lower	speed.			
CSP-534		in front of the subject ca eached the set speed.	r speeds up then the s	ystem will adjust to a higher s	speed, provided the car			Summary Dashboard
CSP-540	The syste			exceeding the maximum spee	ed set by the user		0	🙆 Quality Analysis
CSP-667	The dista	nce threshold will be dis	played for the driver an	d Manufacturer.			0	Term Consistency
CSP-666	The syste	m will re-engage at the pr	eviously set speed once	the accelerator is no longer be	e pressed.		0 2	
CSP-665	The syste cruise co		ts for when the system	n is activated, engaged, as we	ell as the status of the		0	lunit Consistency
CSP-664	The syste	m will be disabled when th	ne driver taps on the bra	kes.			0	Similarity
CSP-663	When the	driver taps the accelerato	r, the system is tempora	arily disengaged while the drive	er accelerates the car.			Send Feedback
CSP-535	The drive	r has the ability to override	e/disable the system at a	all times.				Ŭ.
CSP-533	The syste	m will send status updat	es to the driver using t	he dashboard.				
CSP-668	The set s	peed threshold will be di	splayed for the driver.				0	
CSP-669	A block v	alve is limited to using a	bypass for inspection I	pefore an operation.			0	
CSP-673		shall tolerate inadvertent stem failure.	operator action as des	cribed in requirement 3.8.5.1.	2 in the presence of any		0 2	
CSP-670	Applicati purchase		cy drive electric motor	rs shall be identified in the da	ta sheet as defined by the		0	
CSP-531		r will be able to use butt m is engaged.	ons on the steering wh	eel to set and change the ma	ximum speed whenever		0	
CSP-679	Failure of	aerodynamic control eff	ectors are expected du	uring the failure tolerance che	eck.		❹ ●	
CSP-678	While the	e machine is turned off, tl	nere will be no light sia	nal present.				Create Report

Once you select a requirement, you will see an icon right beside the requirement. You can click this icon to edit/author the requirement.

Keturn to Quality Review

REQUIREMENT I.D. : CSP-535

The driver has the ability to override/disable the system at all times.

Editing/Authoring in the Summary View

This icon will bring you to your authoring/editing window. Click the pencil icon to edit the requirement, then you can edit the text within Polarion or click the QVscribe icon to edit within QVscribe.

🖹 Edit 🔅 🕈	Save Cancel Open in	Document		<i>₽ 8 0</i> T O <i>4</i> →
CSP-541 + t ⇔ @CS t +		ability to override/disable the	system at all times.	Created: 2022-05-31 14:18, Updated: 2022-06-01 14
	😭 System Requirement CSProject		● Should Have ✓ Draft	
Author:	Danielle Power	Resolution: Not Covered by Software Requirements:		
	ription			
The driver h	as the ability to override/disable the system	at all times.		•

T

This brings you to the authoring view, where you can make changes/edits. The QVscribe analysis will update your changes showing you whether your score is improving.

Description

A → B Z U ab ײ ×₂ A → M → Segoe UI → 10 → Ø № Η Η Π = Π = Ξ = M ↔ √x ■ →

The driver has the ability to override/disable the system at all times.

Authoring View

There are two ways you can access QVscribe authoring view.

The first is while viewing a requirement with a Draft Status. You will see the QVscribe icon and score in the bottom right of the description box. Click the QVscribe icon to open QVscribe authoring view for this requirement.

CSP-531 + Created 2022-05-31 14:18, Updated: 2022-06-01 14:08 Created 2022-05-31 14:18, Updated: 2022-06-01 14:08 Created 2022-05-31 14:18, Updated: 2022-06-01 14:08 Severity: Should Have Project: CSProject: Severity: Should Have Project: CSProject: Satures Project: Satures P	😭 Edit 🔅 🔹 🔚 Save 🔹 🖹 Cancel 📄 Open in Doc	ument	♥ <i>& &</i> ∀ <i>\</i> ⊂
Project: CSProject Autor: Danielle Power Resolution: Categories: Not Covered by Software Requirements: Assignee(s):	t 👓 @CSP-535 - The driver has the abi	lity to override/disable the system at all times.	Created: 2022-05-31 14:18, Updated: 2022-06-01 14:05
Categories: Assignee(s):			
Assignee(s):		Resolution:	
Image: Segoe Uline ability to override/disable the system at all times.		Not Covered by Software Requirements:	
The driver has the ability to override/disable the system at all times.	Description		
	B I U ab X ² X₂ A M M Segoe		1*
er •••••	The driver has the ability to override/disable the system at a	all times.	
			(7

Adaptive Cruise Control

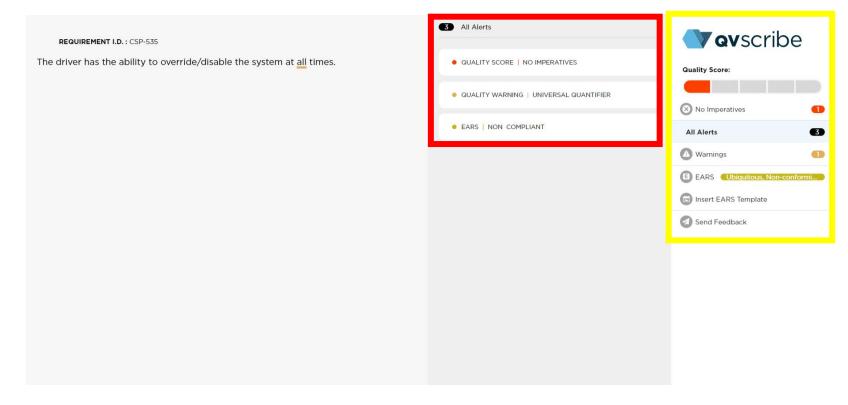
1	CSP-542 - The driver will be able to use buttons on the steering wheel to set and change the maximum speed
	whenever the system is engaged.
4	CSP-736 - The system will have a default following distance of 1.5 s in place after the dr The system will have a default following distance of 1.5 s in place after the driver chooses to engage the FSRACC system.
	Draft 🖤 💶
1	CSP-529 - The following distance will be computed in seconds behind the forward vehicle (i.e. 260 feet of following distance at 60 mph (88 feet per second) is about 3 seconds)
	🥜 Draft 🐨 🎫
1	CSP-531 - The driver will be able to use buttons on the steering wheel to set and change the maximum speed whenever the system is engaged.

The second way is directly in a Live Doc. A Draft requirement within a Live Doc can be editable within QVscribe. Click the QVscribe icon to open QVscribe authoring view for this requirement.

Authoring View

Now, that you are in the QVscribe authoring view you can make changes directly in the text. QVscribe will automatically rerun the Quality Analysis within 2 seconds of any changes you make to the text. The QVscribe score will update accordingly. Once the text updates are complete, simply close the QVscribe authoring view to update the text in the requirement.

Note: QVscribe will not commit any changes to Polarion. It will be important to complete your changes in Polarion as you normally would.

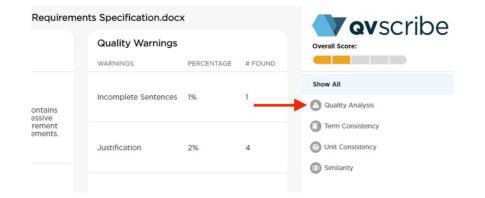


You can select any of the alerts for additional information, support and guidance on editing your requirement. The Filter Menu (in yellow) allows users to filter the specific alerts for the selected requirement.

To view the QVscribe Quality Analysis for your selected Live Doc or filtered Work Items, open the Summary Dashboard by clicking on the QVscribe icon.

	+				▲ – Q 450 found Load all	
ID	Title	Status	Prio Assignee(s) Initial Esti	Remaining	Created	
🗢 🗹 CSP-750	The set speed threshold will be displayed fo	r 🖌 Draft	[] 50.0	:	2023-03-31 01:	i i i i i i i i i i i i i i i i i i i
🗢 📃 🏫 CSP-749	New requirement	🥖 Draft	[] 50.0	2	2023-03-28 18:	
🖘 📃 衛 CSP-748	New requirement	🖉 Draft	50.0	2	2023-03-28 18:	
🖘 📃 🏫 CSP-746	The Garage door opener turns the light on v	w 🖉 Draft	50.0	1	2023-03-28 18:	
🕶 📃 🍘 CSP-745	Regard my pupil a free and active fast being	🖉 Draft	[] 50.0	2	2022-11-16 14:	

Within the Summary Dashboard, select Quality Analysis from the right-hand Navigation Menu.



QVscribe will present the Quality Analysis for each of the requirements based on the order they are displayed in the Live Doc or the filtered Work Items. You may navigate to any of the individual requirements to see their detailed analysis. The 5-level scoring gives you a succinct picture of which requirements need the most attention and which ones adhere to best practices.

At the top of this view are 2 tools that will help you refine the list of requirements to focus on the areas you want to look further:

- 1. The Filter Requirements tool
- 2. The Sort Order tool

			CURRENT: CSPro	oject.pdf			v scribe
Number of Req 282	uirements	Requirements Shown 282	Filter Requirements No Filter		Order of Appea	arance 🔻	Overall Score:
I.D.	REQUIREM	IENT			SCORE	WARNING	
CSP-399	API inter	face shall function with T	oyota vehicles			, (
CSP-398	API inter	face shall function with H	londa vehicles.			•	Summary Dashboard
CSP-397	DrivePilo	t shall provide Software	Throttle interface on DrivePilot Con	nmand Controller (DCC)		•	\Lambda Quality Analysis
CSP-292							Term Consistency
CSP-195				and Controller, its interfaces and conso at all servos will stop working competel			
CSP-408	Accelerat	tor override servo diseng	ages if user taps on the accelerator	r or engages cruise control.			(B) Unit Consistency
CSP-407		t shall provide a Toyota t dently of manual mechan		hat will control the accelerator cable			O Similarity
CSP-406	Accelerat	tor override servo diseng	ages if user taps on the accelerator	r or engages cruise control.			Send Feedback
CSP-405	DrivePilo mechanio		eplacement throttle/accelerator se	rvo on vehicles that do not have a		0	Send reedback
CSP-402	Throttles	must be either mechani	cal or electrical.				
CSP-401	Accelerat	tor override servo diseng	ages if user taps on the accelerator	r or engages cruise control.			
CSP-400		t shall provide a throttle, dently of manual mechan	/accelerator override servo that will ical operations.	control the accelerator cable			
CSP-419	The SOS	will have in-dash mount	option.s			•	
CSP-418	The braki pedal ma		eive information from the BLC and	disengage if the user presses the brake)	
CSP-417	The Brak	ing Software subcontroll	er shall interface with the DCC. It w	ill provide directives to the BLC.			
CSP-416	Unlike me	echanisms with software	-based API controls available, the B	LC shall be mechanical only.			
CSP-415	DrivePilo	ot shall implement a Brak	ing Lever Control (BLC) for all vehi	cles and all applications.			Create Report

The Filter Requirements tool provides a drop-down list that allows you to display requirements based on the 1-5 score calculated by QVscribe or Quality Issues.

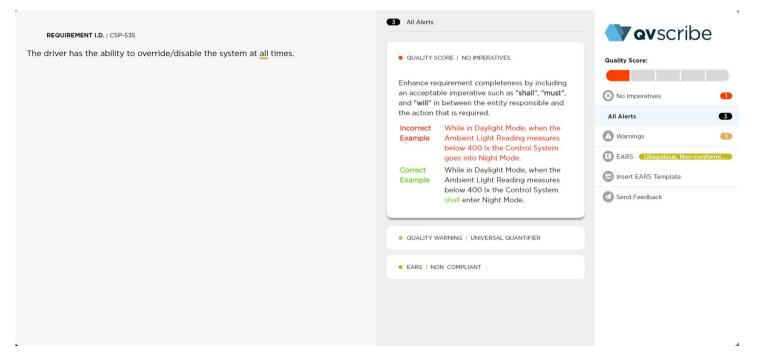
Number of Requir 84	rements	Requirements Shown 84	Five Score	•
I.D.	REQUIREM	ENT	Warning	
CSP-537	If the car	in front of the subject car	Cross-Referencing Pronouns	ist to a lower spec
CSP-534		in front of the subject car eached the set speed.	•	t to a higher spee
CSP-540	The syste	m will maintain the follow	Excessive Continuances	aximum speed se
CSP-667		nce threshold will be disp	Immeasurable Qualifiers	
CSP-666	The syster	n will re-engage at the pre	Incomplete Sentences	s no longer be pre
CSP-665	The syste cruise cor	m will have indicator light htrol.	Justification	→ gaged, as well as

CURRENT: CSProject.pdf	
nents	Order of Appearance
	Low to High Score
n then the system will adjust to a lower speed.	High to Low Score
then the system will adjust to a higher speed, provided the car	Warning Count
e without exceeding the maximum speed set by the user	

The Sort Order tool provides a drop-down list of several sorting options based on the requirements order, quality score, or the number of warnings associated.

CURRENT: CSProject.pdf

When viewing the details of any analyzed requirement in QVscribe that has one or more alerts, you can select any alert to see more detail on the specific alert.



In the example above, the quality alert for "No Imperatives" has been generated. Selecting the alert will then highlight some guidance on how to resolve this problem along with an incorrect and correct example of the problem.

By default, all alerts will be displayed. Alerts can be filtered by using the right-most menu. This allows the user to focus on one specific type of alert, hiding all the others.

Consistency Analysis

QVscribe's Consistency feature includes 2 types of analyses: units and terms. You access these analyses in the Navigation Menu of the Summary Dashboard.

			CURRENT: CSProject.pdf					av scribe
Quality Sco	ore Summa	ry		Quality	/ Warnings			
SCORE	# OF REQ.	*PERCENTAGE	WHAT SHOULD I DO?	WARNING	iS	*PERCENTAGE	# FOUND	Overall Score:
			Very High Risk	Incomplet	e Sentences	1%	1	
	16	19%	The requirement lacks an imperative, or contains multiple imperatives, and/or contains excessive vague terms. The requirement could also have multiple instances of low-risk	Justificatio	n	0%	0	Summary Dashboard
			errors such as excessive continuances, vague phases, etc which have a cumulative effect on the score. Consider rewriting the requirements or separating into multiple concise requirements.	Passive Vo	bice	58%	49	Quality Analysis Term Consistency
			High Risk	Universal (Quantifier	11%	9	
	3	4%	Includes multiple instances of vague, subjective, or weak terms, and/or negative imperatives. Replace negative or ambiguous terms with clear and concise terms.	Total # of Qua	Total # of Quality Warnings			Unit Consistency Similarity
	20	24%	Medium Risk Includes a single instance of a vague, subjective, or weak term, and/or a single negative imperative. Replace the negative or ambiguous term with a clear and concise term.	# of Units	Unit Consistency			Send Feedback
	0	0%	Low Risk May include excessive use of continuances, and/or No directives. Check the flow and clarity of the requirement.		3 Term Consistency			
	45	54%	Very Low Risk Includes clear and unambiguous terminology to express the requirement.	 155 * Percentages are based on the occurrences of each quality issue within all analyzed requirements. Note that these percentages are not correlated and will not generally add up to 100% (since some requirements have 				
Total # of Requirem	ents			multiple iss	ues and others may h	nave none)		
		Score Summar	y 🛡 🔍 Score Breakdown 🌶					Create Report

Term Consistency

All found nouns and noun phrases are displayed in the Term Consistency list, along with a total count and number of terms similar to it.

You can search for a specific term by entering text beside the magnifying glass icon.

Q		
-		

Terms can be organized by selecting the drop-down beside the "Alphabetical Order" text in the top right. The options are:

- <u>Alphabetical Order:</u> The default option, displays terms alphabetically
- <u>Most Occurrences:</u> Displays terms in order of the number of times they appear from highest number of occurrences to least number of occurrences
- <u>Most Similar</u>: Displays terms in order of the number of similar terms, from the highest number of similar terms to the least number of similar terms
- <u>Highest % Match</u>: Displays terms based on the highest % match to other identified terms

	av scribe				
Number of Terms 155	Terms Shown 155	Q		Alphabetical Order	Overall Score:
		OCCURRENCES	# OF SIMILAR	HIGHEST % MATCH	
А					
ability		1	0	0%	Summary Dashboard
accelerator		2	0	0%	(Quality Analysis
aerodynamic contr	ol effectors	2	0	0%	Term Consistency
aircraft		2	0	0%	-
airplane		1	1	70.71%	Onit Consistency
airplane flaps		1	1	70.71%	O Similarity
alarm		1	0	0%	Send Feedback
amount		1	0	0%	
Applications		1	0	0%	
ATC system		1	7	70.71%	
В					
block valve		1	0	0%	
brakes		1	0	0%	
button		3	2	89.44%	
buttons		2	2	89.44%	
bypass		1	0	0%	Create Report



Term Consistency

The terms in the Consistency section can be explored by selecting any term to show all requirements where that term appears, as well as a list of similar terms and the %-similarity. Each of these similar terms can be expanded to show the requirements where it appears. This helps rapidly verify that these similar terms are valid and reside in the correct requirements.

	c	CURRENT: CSProject.pdf		av scribe
Keturn to Term	n Review	control system		
I.D.		REQUIREMENT TEXT		Overall Score:
CSP-677	The control system shall prevent engine overspe	eed while the machine is engaged.		
CSP-692	While the aircraft is on the ground, when reverse	e thrust is commanded, the <mark>control system</mark>	shall enable deployment of the thrust reverser.	Summary Dashboard
CSP-691	Where airplane flaps are enabled, while the airc green light.	Quality Analysis		
CSP-714	If the machine is turned on and the lights are sw	Term Consistency		
CSP-725	If the car in front of the subject vehicle slows do	Consistency		
CSP-708	If the car, in front of the subject vehicle slows do	 Similarity 		
Similar Terms				Send Feedback
	OCCURRENCES	# OF SIMILAR	HIGHEST % MATCH	
Α				
ATC system	1	7	70.71%	
С				
cruise control s	system 1	2	79.47%	
S				
signal system	1	5	82.92%	
system	28	10	63.25%	Create Report

Unit Consistency

Unit Consistency displays all units detected, along with their type categorization and total count. Each unit in the list can be expanded to show the requirements where it was found. This helps ensure that the right unit is in the right requirement and that there is consistency in the system of units used throughout the document (i.e. metric or imperial).

You can search for a specific unit by entering text beside the magnifying glass icon.

Q			

Units can be organized by selecting the drop-down beside the "All" text in the top right. The options are:

- <u>All:</u> The default option, displays all the identified units
- <u>International System of Units (SI)</u>: Displays identified SI units
- Inconsistent with International System of Units (SI): Displays identified units that are not SI units(imperial)

-		c	URRENT: CSProject.pdf		av scribe
Number of Units 22	Units Shown 22	0		All	Overall Score:
		OCCURRENCES	TYPE	ABBREVIATION(S)	
acceleration					
meter per squared	d second	3	International System of Units(SI)	metre per squared second, m/s2, m/s², m/s^2	Summary Dashboard
electric current					Quality Analysis
amp		1	International System of Units(SI)		Term Consistency
milliampere		1	International System of Units(SI)	mA	
electric potential	difference, electro	motive force			Unit Consistency
volt		1	International System of Units(SI)	V	3 Similarity
force					Send Feedback
newton		1	International System of Units(SI)	Ν	Ū
length					
foot		1		ft, feet	
link		1			
kilometer		3	International System of Units(SI)	kilometre, km	
millimeter		1	International System of Units(SI)	millimetre, mm	
meter		14	International System of Units(SI)	metre, m	
centimeter		8	International System of Units(SI)	centimetre, cm	
mass					Create Report



Unit Consistency

Selecting any unit in the list will display all the requirements that include that unit with the unit highlighted.

	CURRENT: CSProject.pdf		av scribe
Return to Unit	t Review		
	meter		Overall Score:
I.D.	REQUIREMENT		
CSP-561	The Lunar Exploration Light Rover shall accelerate back up to 15 km/h within ten seconds of stopping, and shall initiate each stop within ten seconds of reaching 15 km/h. For each of the five stops, the Lunar Exploration Light Rover shall stop within a distance of 4.2 m. Rationale: This is similar to brake fade tests performed on earth, and is necessary for safe operations. This will give the analog rover an ability to resist temperature-related brake fade in a manner similar to that defined in CMVSS 135. Note, maximum speed is 80% of the maximum, consistent with the CMVSS 135 approach.	~	Summary Dashboard Quality Analysis Term Consistency
CSP-573	The range to the edge of the workspace should be no less than 2 m .8. Zoom: The Lunar Exploration Light Rover imaging shall, upon command, change the field of view in a range of 2 degrees to 30 degrees diagonal dimension, in steps of 1 degree maximum.Rationale: Zoom capability is in general to support detailed imaging of distant targets while also supporting driving and other close-by operations which require a wide field	~	 Unit Consistency Similarity
CSP-585	[EC-LMR-FNC-052] Sensor Height: Basic digital terrain mapping and terrain imaging from at least one imager shall be done from an adequate height to see over obstacles of Im height. Comment: The precise height is left to the contractor to optimize for the requirement to see over obstacles	~	Send Feedback
CSP-552	The intent is to permit a variety of running gear solutions, be they wheels, tracks or other.Comment: For reference, MMP is defined and calculated for wheeled vehicles as follows: MMP = $(K' \times W) / \{2m \times b^0.85 \times d^1.15 \times [Delta/d]^0.5\}$ where $K' = 1.83$ (axle factor: 2 axles, both driven) W = maximum gross vehicle weight, kNm = number of axlesb = tire width, unladen, md = tire diameter, unladen, mDelta = tire deflection under vehicle weight W, ma) For the purpose of standardization, tire diameter, d, shall be the diameter taken at the base of the tread	~	
CSP-586	the Advanced Vision Systems and science instruments) at 2m above ground level	\sim	
CSP-597	[EC-LMR-PRF-340] Absolute localization: The Lunar Exploration Light Rover shall determine its absolute location to within 100 m. Rationale: Design choice by CSA based on scenario needs	~	Create Report
CSP-564	[EC-LMR-PRF-060] Ground Clearance: The Lunar Exploration Light Rover shall be able to pass over an obstacle with a height of	\sim	

Similarity Analysis

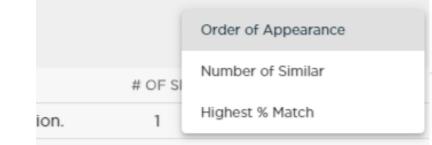
The Similarity Analysis displays which requirements are similarly written and how closely they match. You access the Similarity Analysis in the Navigation Menu of the Summary Dashboard.

The Similarity Analysis can be used to identify possible duplications and/or contradictions across requirements.

The requirements can be organized by selecting the drop-down beside 'Order of Appearance' text in the top right. The options are:

- <u>Order of Appearance:</u> The default option, displays requirements in the order that they appear in the Live Doc or filtered Work Items
- <u>Number of Similar</u>: Displays requirements that have the highest number of similar requirements to the least number of similar requirements
- <u>Highest % Match:</u> Displays requirements based on the highest % match to other requirements

	CURRENT: CSProject.pdf			av scribe
Number of Requ 229	irements	Order	r of Appearance 👻	Overall Score:
I.D.	REQUIREMENT	# OF SIMILAR	HIGHEST % MATCH	
CSP-399	API interface shall function with Toyota vehicles	1	85.11%	
CSP-398	API interface shall function with Honda vehicles.	1	85.11%	Summary Dashboard
CSP-397	DrivePilot shall provide Software Throttle interface on DrivePilot Command Controller (DCC)	4	58.27%	Quality Analysis
CSP-195	This failure mode applies to complete failure of the DrivePilot Command Controller, its interfaces and consoles. The effects of the DCC systematically shutting down would mean that all servos will stop working competely.	1	51.37%	Term Consistency
CSP-408	Accelerator override servo disengages if user taps on the accelerator or engages cruise control.	2	100%	Hit Consistency
CSP-407	DrivePilot shall provide a Toyota throttle/accelerator override servo that will control the accelerator cable independently of manual mechanical operations.	3	98.25%	O Similarity
CSP-406	Accelerator override servo disengages if user taps on the accelerator or engages cruise control.	2	100%	Send Feedback
CSP-405	DrivePilot shall provide a Honda replacement throttle/accelerator servo on vehicles that do not have a mechanical cable.	2	60.92%	Send reedback
CSP-401	Accelerator override servo disengages if user taps on the accelerator or engages cruise control.	2	100%	
CSP-400	DrivePilot shall provide a throttle/accelerator override servo that will control the accelerator cable independently of manual mechanical operations.	3	98.25%	
CSP-419	The SOS will have in-dash mount option.s	1	64.78%	
CSP-418	The braking subcontroller will receive information from the BLC and disengage if the user presses the brake pedal manually.	2	70.55%	
CSP-417	The Braking Software subcontroller shall interface with the DCC. It will provide directives to the BLC.	2	87.44%	
CSP-415	DrivePilot shall implement a Braking Lever Control (BLC) for all vehicles and all applications.	1	75%	
CSP-413	The SOS will have an under-hood, and in-dash mount option. It shall mount directly to the steering shaft.	2	64.78%	
CSP-412	The steering subcontroller will receive information from the SOS and disengage if the user grabs the wheel to override the SOS.	5	70.55%	Create Report



Similarity Analysis

Expanding a requirement lists its similar requirements on the right, along with a percentage of how similar they are. Clicking a similar requirement in the list will then display the clicked-on requirement below the original with the differences highlighted in light purple.

Keturn to Similarity Review	10 Filtered Alerts	av scribe
REQUIREMENT I.D. : CSP-537	SIMILARITY 81% REQUIREMENT FOUND	Quality Score:
If the car in front of the subject car slows down then the system will adjust to a lower speed.	SIMILARITY 100% REQUIREMENT FOUND	All Alerts
COMPARED REQUIREMENT I.D. : CSP-534	SIMILARITY 91% REQUIREMENT FOUND	O Similarity 10
If the car in front of the subject car speeds up then the system will adjust to a	SIMILARITY 67% REQUIREMENT FOUND	E EARS Unwanted Behaviors, Non
higher speed, provided the car has not reached the set speed.	SIMILARITY 92% REQUIREMENT FOUND	Send Feedback
	SIMILARITY 92% REQUIREMENT FOUND	
	SIMILARITY 80% REQUIREMENT FOUND	
	SIMILARITY 81% REQUIREMENT FOUND	
	SIMILARITY 90% REQUIREMENT FOUND	
	SIMILARITY 57% REQUIREMENT FOUND	

Generate PDF Report

A PDF report can be generated with all the information in the QVscribe Summary Dashboard by selecting Generate Report in the right-hand corner.

Quality Sco	ore Summa	ary		Quality Warnings	5		
SCORE	# OF REQ.	*PERCENTAGE	WHAT SHOULD I DO?	WARNINGS	*PERCENTAGE	# FOUND	Overall Score:
			Very High Risk	Incomplete Sentences	2%	5	
	131	46%	The requirement lacks an imperative, or contains multiple imperatives, and/or contains excessive vague terms. The requirement could also have multiple instances of low-risk	Justification	4%	11	Summary Dashboard
			errors such as excessive continuances, vague phases, etc which have a cumulative effect on the score. Consider rewriting the requirements or separating into multiple concise requirements.	Passive Voice	54%	151	Quality Analysis
			High Risk	Universal Quantifier	20%	56	Term Consistency
	19	7%	Includes multiple instances of vague, subjective, or weak terms, and/or negative imperatives. Replace negative or ambiguous terms with clear and concise terms.	Total # of Quality Warnings			 Unit Consistency Similarity
	48	17%	Medium Risk Includes a single instance of a vague, subjective, or weak term, and/or a single negative imperative. Replace the negative or ambiguous term with a clear and concise term.	Unit Consistency # of units			Send Feedback
	1	0%	Low Risk May include excessive use of continuances, and/or No directives. Check the flow and clarity of the requirement.	22 Term Consistenc # of Terms	у		
	83	29%	Very Low Risk Includes clear and unambiguous terminology to express the requirement.	1651 * Percentages are based on th all analyzed requirements. No and will not generally add up	e that these percentages	are not correlated	

Create Report

Easy Approach to Requirements Syntax (EARS) Templates

When writing requirements or working through QVscribe alerts, you can use the Easy Approach to Requirements Syntax (EARS) templates to simplify the writing or re-writing process. The Easy Approach to Requirement Syntax(EARS) is a standard for writing requirements that will improve the quality and consistency of your requirements.

When viewing a requirement in QVscribe's authoring view, you can use EARS Templates by selecting 'Insert EARS Template'.

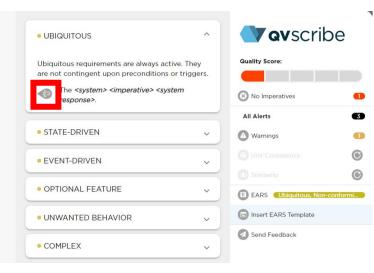
 UBIQUITOUS 	~	av scri	be
STATE-DRIVEN	~	Quality Score:	
• EVENT-DRIVEN	~	🛞 No Imperatives	
• OPTIONAL FEATURE	~	All Alerts	
• UNWANTED BEHAVIOR	~	Unit Consistency	
COMPLEX	~		
		E EARS Ubiquitous, Nor	n-conforr
		Insert EARS Template Insert EARS Template Insert EARS Template Insert EARS Template	
	STATE-DRIVEN EVENT-DRIVEN OPTIONAL FEATURE UNWANTED BEHAVIOR	STATE-DRIVEN V EVENT-DRIVEN V OPTIONAL FEATURE V UNWANTED BEHAVIOR V	 STATE-DRIVEN EVENT-DRIVEN OPTIONAL FEATURE UNWANTED BEHAVIOR COMPLEX COMPLEX

Easy Approach to Requirements Syntax (EARS) Templates

Select one of the EARS templates made available within QVscribe. By clicking on any of the options listed, the full template and explanation for this EARS Template will be shown. Once you have selected the template you would like to insert, click the grey icon to insert it into your requirement.

REQUIREMENT I.D. : CSP-535

The driver has the ability to override/disable the system at all times.



REQUIREMENT I.D. : CSP-535

The driver has the ability to override/disable the system at all times.

The <system> <imperative> <system response>.

• UBIQUITOUS

Quality Score: Ubiquitous requirements are always active. They are not contingent upon preconditions or triggers. The <system> <imperative> <system No Imperatives response>. All Alerts STATE-DRIVEN Warnings EVENT-DRIVEN OPTIONAL FEATURE E EARS Insert EARS Template • UNWANTED BEHAVIOR Send Feedback COMPLEX

vscribe

O

3

()

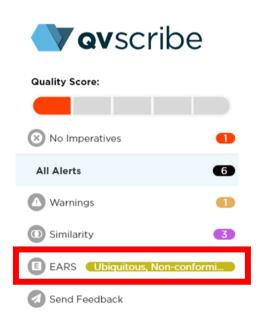
G

Once the template has been added to the requirement section, you are able to modify it freely. After modification, QVscribe will check for conformance with EARS Templates.

Easy Approach to Requirements Syntax (EARS) Templates

When viewing a requirement in the Quality Analysis, QVscribe will automatically detect if a requirement is compliant with the EARS standard. The identification of a requirement's compliance with the EARS standard will be displayed in the Alert Column.

Selecting the Alert will provide an expanded view that includes additional information about compliance with the EARS format.



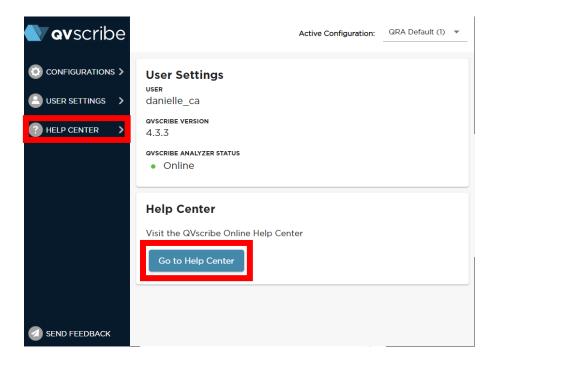
K Return to Quality Review	6 All Alerts	av scribe
REQUIREMENT I.D. : CSP-535	QUALITY SCORE NO IMPERATIVES	Quality Score:
The driver has the ability to override/disable the system at all times.	QUALITY WARNING UNIVERSAL QUANTIFIER	No Imperatives
	• EARS NON COMPLIANT	All Alerts 6
	Ubiquitous	Warnings 1
	Ubiquitous requirements are always active. They are not contingent upon preconditions or triggers.	Similarity EARS Ubiquitous, Non-conformi
	The <system> <imperative> <system response>.</system </imperative></system>	Send Feedback
	TEMPLATE SECTION FOUND IN REQUIREMENT <system> Not Found <imperative> Not Found <system response=""> Not Found <system response=""> Not Found</system></system></imperative></system>	

Additionally, the specific type of EARS requirement will be displayed in the right-hand menu.

QVscribe Help Center

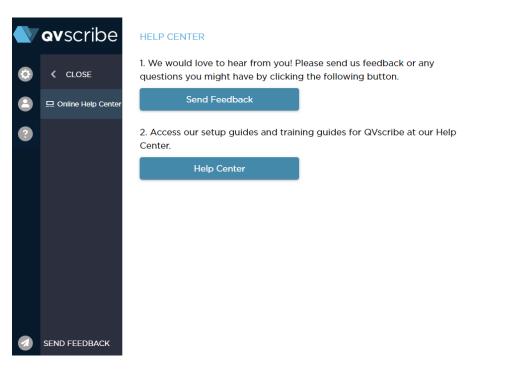
The QVscribe Help Center details can be found by clicking the QVscribe browser extension.

To go to the Help Center, you can find the link directly on the main page of the QVscribe Browser Extension Menu. If you select the Help Center option on the left, you can find more information. Another link to the Help Centre can be found here.





If you experience errors, unexpected behavior in QVscribe or if you would like to contact us for assistance, select the Send Feedback option on the left.



Thank You

QRA

To learn more about QVscribe, visit qracorp.com