

# DevSecOps & Automation – EP&S

Monthly Report Out - March 2024

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## **2024 OKR AND FOCUS AREAS**

## **DevSecOps**

- 1- Improve maturity for business critical applications
- to Level 3 (minimum).- focus on 10% of applications (50) that have completed Assessment.
- 2- Focus on DevSecOps maturity for apps already in cloud or plan to move in 2024
- 3- Complete assessment for product with highest ROI 20% Remaining Apps.
- 4- Build Reusable libraries from learnings and success stories
- 5- Training and Upskilling sessions for team ( 3 per Quarter)
- 6- Pilot projects with Software chapter team to improve maturity

## **Automation**

- 1- Improve Automation efficiency high ROI Products and bring product efficiencies.
- 2- Overall savings of 140K Hrs
- 3- Build Lean practices and automation for Compliance , TechDebt and Compute

## **High ROI products for focus:**

- Jennifer
  - Regulatory and Safety
- Tatum
  - System Engineering
  - Electrical Engineering
  - Customer Engineering (CE)
- Buba
  - Digital Market Products
  - Technical Publications
- Jeff
  - Embedded Program Support
  - Product Support Analysis



## **PROGRESS**

## Objectives – E&PS

- ☐ Automation Savings 2024: 140K Hrs.
- **□** DevSecOps Assessments: 130 Apps
- □ DevSecOps Maturity Improvement 50 Apps
- ☐ Upskill Sessions 12

### Status

- □ Automation Savings Achieved : 23577 Hrs.
- DevSecOps Assessments :
  - ☐ Completed 4
  - ☐ In-Progress(Roadmap Pending) 36
- DevSecOps Maturity Improvements (Re-assessments)
  - ☐ Completed 1
  - □ In-Progress(Roadmap Pending) 9
- Upskill Sessions
  - ☐ Completed 2
  - ☐ Scheduled 2

## Highlights & Look Ahead

- ☐ Focal working with product team to work on prioritizations
- ☐ Pilot project:
  - DORA Metrics integration.
  - McKinsey POC for CE & Electrical
- ☐ Upcoming sessions planned Q2
- Build Reusable libraries from learnings and success stories
- ☐ Tableau Dashboard LINK

## Help Needed

- □ Prioritization on DevSecOps adoption in products
- Automation Savings updates on COP



# **ENGINEERING PROGRESS**

			2024 Target				2024 Actuals				
	Product Name Applic			Assessments	Reassessments	Automation Savings Target (70000)	DSO Focal Assigned	Assess	ments	Reasses	sments
Director		Application #	Total assessments Completed				Primary Focal	Complete d	In- Progress	Complete d	In- Progress
	TOTAL	177	39	27	6				7		1
	Regulatory and Safety	29	12	3	2	1100	Radhakrishnan, Chinjumol		2		ı
Jennifer	Research and Technology	11	9		1		Singh, Abhishek K				
	Test and Evaluation	43	14	7	2		<u>Jha, Ravi N</u>		5		1
	IPDM PLM	94	4	17	1		Singh, Omji Kunjbihari				
	TOTAL	333	149	56	22			3	10	1	3
	Authoring Process Planning	27	16	1	2		<u>Urimindi, Sreenivasulu</u>		2		
	Data Distribution and Management	57	19	8	3		Mohiddin Basha, Mahammed Gulam	1	2		1
	Automation Programming	24	4	4	1		Chougule, Priyanka Dhanpal		1		1
	Customer Engineering (CE)	9	0	2	0		Nair, Aathira Manikandan	1	1		
Tatum	3DX PLM	12	14	1	2		<u>Kaur, Harmeet</u>				1
	Electrical Engineering	44	6	11	1		K L, Bharath	1		1	1
	Flight Engineering and Propulsion	51	62	14	9		<u>Vinod, Thomas</u>				
	Mechanical and Structural Engineering	50	6	8	1		<u>P, Ashwini</u>		2		
	Systems Engineering	46	5	6	1	11224	<u>Prabhat, Kumar</u>				1
	Production System Simulation	1	1						2		
	Visualization and xR	12	16	1	2		Rompicherla, Rakesh				
	TOTAL	510	188	83	28	12324		3	17	1	4



# PRODUCT SUPPORT PROGRESS

			2024 Target				2024 Actuals				
	Product Name	Application #	Total assessments Completed		Reassessments	Automation Savings Target (70000)	DSO Focal Assigned	Assess	ments	Reasses	sments
Director				Assessments			Primary Focal	Complete d	In- Progress	Complete d	In- Progress
	TOTAL	147	70	20	10	35000	-		10		4
	Digital Market Products	43	22	6	3		Popeck (US), John		6		1
Buba	Customer Operations	24	16	2	2		Balraj, Bharath K		3		2
	Technical Publications	55	23	7	4		Kandan, Narendran		1		1
	Training & Other	25	9	5	1		Rooge, Padma Prasad				
	TOTAL	226	76	30	12	35000		1	9		1
	Automation Programming	26	26		4		H D, Sarika				
	Innovation Hub										
	Material Management	20	9	3	1		Jenkins (US), Renee M		3		
Jeff	Maintenance Repair and Overhaul	27	12	3	2		Fink (US), Brendan A		2		
	Integrated Logistics Planning and Management	33	11	5	2		Nadampalli Kumarraju, Lavanya	1	1		
	Product Support Analysis	31	7	5	1		<u>Varghese, Jessy</u>				
	Embedded Program Support	89	11	14	2		Amaragatti, Sharanappa		3		1
	TOTAL	373	146	50	22	15087		1	19		5



# **POC STATUS**



## **CODE WHISPERER UPDATES**

### **Background**

Boeing is evaluating Amazon Web Services (AWS) CodeWhisperer through a Proof of Concept exercise with the intent of implementing the tool in various business operations.

#### Goal

To validate and understand the use cases and terms of service of the tool while also measuring the efficiency of the code generated

## **Objective**

Test several use cases and quantify the impact on accuracy and productivity across different functions within various software engineering teams, looking at its applicability within an operational context. Also, identify the critical safety concerns and potential hazards.

Teams from IT&DA M&Q, DPACS, Software Engineering, and BR&T Math formed to evaluate

### **Use Cases in Work**

- Code coverage for unit test case
- Actual business usecase like NIMT, Redars line darkening
- Legacy application automated test case
- Creating UI frontend code & unit test cases for Vue.JS application
- Explore the Coverity high and medium security scanning
- o Oracle form migration . Customer engineering
- Gen Al web app Evaluation
- BGS DAS Platform
- Product Standards



# **TECHNICAL SESSION**



# **TECHNICAL SESSION DETAILS**

No.	Topic	Presenter Name	Date	Trainings Links
1	Software Composition Analysis	Sushil Mishra	12 <sup>th</sup> March,2024	Completed Session Recording
2	Containerization, Dockers and Deployment on Cloud	Siddharth Muttin	20 <sup>th</sup> March, 2024	Completed Session Recording
3	Deploy self-hosted Azure agent on OpenShift	Sumeet Kumar	17 <sup>th</sup> April	Enrollment open Click here
4	Deploy Selenium grid on OpenShift for test cases execution	Sumeet Kumar	8 <sup>th</sup> May	Enrollment open Click here
5	GCP	Anup Pattanaik	TBD	



# **AUTOMATION PROGRESS**



## **AUTOMATION 2024**



Implement automation capabilities through out the applications and achieve 140000 automation hours

## **Objective**



Automate repetitive processes



Capture automation to Return On Investment.

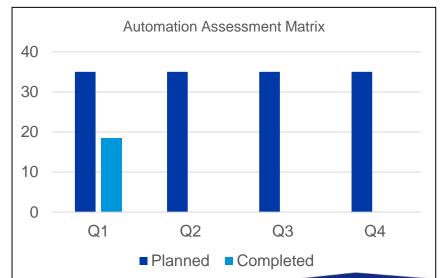


Knowledge sharing and bring culture of Automation

## **Accomplishments**:



Automation hours of 18523 Hrs has been accounted in the CoP.





# **AUTOMATION STATUS - 2024**

Target: 140k hrs

**Current status: 18.5k hrs** 



**Lucia Chung** 

**Engineering and Product Support** 

Total : **18523** hours



#### Jennifer Davis

Engineering and Product Support

Status	Saved	Efficiency	Avoided
Complete		1100	
In-Work		144	
Backlog			
T-1-1-	-	144	
Totals		1244	



#### Tatum Shannon

Engineering and Product Support

Status	Saved	Efficiency	Avoided
Complete	-	-	11224
In-Work	-	-	-
Backlog	-	-	-
Totals	-	-	11224
iotais		11224.	



#### **Buba Turner**

Engineering and Product Support

Status	Saved	Efficiency	Avoided
Complete	-	5	-
In-Work	-	6,000	-
Backlog	-	-	-
Totals	-	6,005	-
iotais		6,005	



Totals

50

# TRAINING AND REFERENCES



## TRAINING AND SUPPORT

### **Automation COP**

https://devsecops.web.boeing.com/index.html [DevSecOps Enterprise Website]

### Training:

https://devsecops.web.boeing.com/trainings.html

https://insite.web.boeing.com/culture/viewMedia.do?mediaId=428840

Insite: DevSecOps related video series

Degreed: https://degreed.com/pathway/mpl66o5r9d/pathway

Oreilly: https://learning.oreilly.com/library/view/the-devops-handbook/9781457191381/

### **Enterprise Support**

In case of any queries interested teams can register themselves through EMC (check for the session with the name "DevSecOps Office Hours (India)"). For Product Teams in US, Click Here to block your slot

For Product Teams in India, Click Here to block your slot

DSO Support Systems	Description	URL
ATOMS	Platform to onboard to some of the commonly used tools like Coverity, Netsparker, SonarQube	https://atoms.web.boeing.com/home
ATOMS-CI	Saves your team time by generating an automated continuous integration pipeline and integrating different tools	https://atoms-ci.web.boeing.com/ci
DevSecOps	Official DevSecOps website	https://devsecops.web.boeing.com/index.html
AppDynamics	Monitoring tool documentation	https://itms.pages.boeing.com/wiki/appdynamics/
Enablement kit	Architecture Checklist to improve maturity	https://devsecops.web.boeing.com/assessment/enablementKit.html
DSO Mattermost channel	Join this channel for any questions/updates	https://mattermost.web.boeing.com/dso/channels/town-square
DSO Consultation	Connect with the experts	DL DSO Consulting
DSO COE InSite Group	Join this group for any questions/updates	https://insite.web.boeing.com/culture/viewGroup.do?groupId=168061
DevSecOps Video Library	Videos on different implementation	https://insite.web.boeing.com/culture/displayGroupMedia.do?groupId=168 061



# **ASSESSMENT PROCESS**

### **DevSecOps Assessment Process Flow (Swimlane)**

Please refer to the attached PDF.



### **GSEP Process for Dashboard Access**

Please use the <u>link</u> to get access to the assessment dashboard. This is an auto approval process. Please select the first option for Business Stakeholder group.

Try to access this <u>Dashboard Link</u> after few minutes.

## Info center Dashboard Link

Refer attached excel for pending reassessments and assessments.



# **CONTACT US**

	DRI	Project Management	Core Team Focal	Enterprise collaboration
DevSecOps	Abhishek Singh Kenneth C Shew	Kolhar Laxmidevi Kumar Anand	<ol> <li>Singh, Abhishek K</li> <li>Valiyarayil, Siby</li> <li>Nair, Aathira Manikandan</li> <li>P, Ashwini</li> <li>Amaragatti, Sharanappa</li> <li>Balraj, Bharath K</li> <li>Fink (US), Brendan A</li> <li>Ghosh, Subhabrata</li> <li>H D, Sarika</li> <li>Jenkins (US), Renee M</li> <li>Jha, Ravi N</li> <li>K L, Bharath</li> <li>Kandan, Narendran</li> <li>Kaur, Harmeet</li> </ol>	<ol> <li>Sharina Haynes</li> <li>Karthik Tirukkoylur Sekhar</li> <li>Dolly Bhaskara</li> <li>Sushil Mishra</li> <li>Donald R Wellington</li> </ol> DL DSO DRIs
Automation	Kenneth C Shew  Naga Harsha Kaggallu	Priyanka Dhanpal Chougule	<ol> <li>Kumar, Abhishek</li> <li>Kumar, Rahul</li> <li>Malik (US), Muhammad A</li> <li>Mohiddin Basha, Mahammed Gulam</li> <li>Nadampalli Kumarraju, Lavanya</li> <li>Padmanaban Shunmugam, Nihila</li> <li>Pattanaik, Anup K</li> <li>Popeck (US), John</li> <li>Prabhat, Kumar</li> <li>Prakash, Sumit</li> <li>Radhakrishnan, Chinjumol</li> <li>Rompicherla, Rakesh</li> <li>Rooge, Padma Prasad</li> <li>Singh, Omji Kunjbihari</li> <li>Urimindi, Sreenivasulu</li> <li>Varghese, Jessy</li> </ol> DL Product Systems - DevSecOps Core Team	

# **THANK YOU**

