

TATA ELXSI

DISCOVER

Improving the overall visualization and UI of the application for an American telecommunications conglomerate

Digital Transformation | Data Driven Analytics And Visualization | Network Testing And Monitoring | Application Modernization



Improving the overall user experience of the customer's application to improve data visualization and usability and redesigning the entire visual look and feel of the UI.

Device Details

- Device Model: Arris XG1v3
- Image Name: AX013AN_3.8p10s1_VBN_sey

Performance Max

- CPU Utilization: 97.50%
- Memory Utilization: 168.80 MB
- Load Average: 6.29

Performance Details for TC-APPS-024

Test Description: To verify the memory utilization while navigating inside the Application

Number of Crashes: 0 Crash File Names: NA

Performance Graphs:

- CPU Usage:** Line graph showing CPU usage percentage over time, fluctuating between approximately 40% and 60%.
- Memory Usage:** Line graph showing memory usage in MB over time, increasing from 0 to approximately 150,000 MB.
- Load Average:** Line graph showing load average over time, rising from 0 to approximately 6.29.

Test Results Table:

Image Name	Status	Type	Action
sdj_NG-	COMPLETED	MANUAL TRIGGER	[Icons]
sdj_NG.bin	COMPLETED	MANUAL TRIGGER	[Icons]
3635sdy_N	FAILURE	MANUAL TRIGGER	[Icons]
3953sdy_N	COMPLETED	MANUAL TRIGGER	[Icons]
sdj_NG-	COMPLETED	MANUAL TRIGGER	[Icons]
3656sdy_N	COMPLETED	Auto Re-TRIGGERED	[Icons]
AUTO_QUICK_TEST_JOB_FACE_V1	COMPLETED	MANUAL TRIGGER	[Icons]
AUTO_4HOURL_TEST_JOB	COMPLETED	Re-TRIGGERED	[Icons]

Execution Results - Test Case Level

24-SEPTEMBER-2019 (EST)

ALL REGULAR(186) QUICK TEST(63) 1 HOUR(48) 4 HOUR(13) 2 DAYS(16) PERFORMANCE(0) COMPONENT/OTHER TEST(46)

ALL CI(17) QUICK TEST(17) COMPONENT TEST(0)

Test Case Results Table:

Image Name	Type	Total	Pass	Fail	NT	NR	NA	Start Date Time (EST)	End Date Time (EST)
MOTOROLA-XG1V3									
AX013AN_3.11p2s2_VBN_sey_IPV6	CDN (0/0/1)	1	0	1	0	0	0	24-SEP-2019 02:51	24-SEP-2019 05:02
AX013AN_3.11p2s2_VBN_sey_IPV6	CDN (0/0/1)	1	0	1	0	0	0	24-SEP-2019 02:50	24-SEP-2019 05:02
AX013AN_3.11p2s2_VBN_sey_IPV6_HDMONITOR	1h (0/0/2)	2	0	2	0	0	0	24-SEP-2019 15:25	24-SEP-2019 21:58
AX013AN_3.11p2s2_VBN_sey_IPV6_HDMONITOR	2d (0/0/2)	2	0	2	0	0	0	24-SEP-2019 15:25	24-SEP-2019 23:48
AX013AN_3.11p2s2_VBN_sey_IPV6_HDMONITOR	GROUP_OR_AUTO ID (0/0/4)	10	2	8	0	0	0	24-SEP-2019 15:25	25-SEP-2019 01:24
AX013AN_3.11p2s2_VBN_sey_IPV6_HDMONITOR	NEW_FEATURE (0/0/1)	1	0	1	0	0	0	24-SEP-2019 15:25	24-SEP-2019 22:23
AX013AN_3.11p2s2_VBN_sey_IPV6_HDMONITOR	qt (0/0/1)	1	1	0	0	0	0	24-SEP-2019 15:25	24-SEP-2019 15:54
AX013AN_VBN_1909_sprint_20190923232656sdy_NG_IPUNEAR_IPV	1h (0/0/7)	20	15	5	0	0	0	24-SEP-2019 02:38	24-SEP-2019 06:16

Test Case Details:

TC-APPS-1018	Test to validate Walking Dead application	TC-STB-APPS-018	s1	Tune to any QAM channel	Channel should be tuned and AV should be verified successfully
TC-APPS-1018	Test to validate Walking Dead application	TC-STB-APPS-018	s2	Launch the Walking Dead Application using deep link	Walking Dead app is launched.
TC-APPS-1018	Test to validate Walking Dead application	TC-STB-APPS-018	s3	Verify game play using OCR.	Game should begin

Previous design

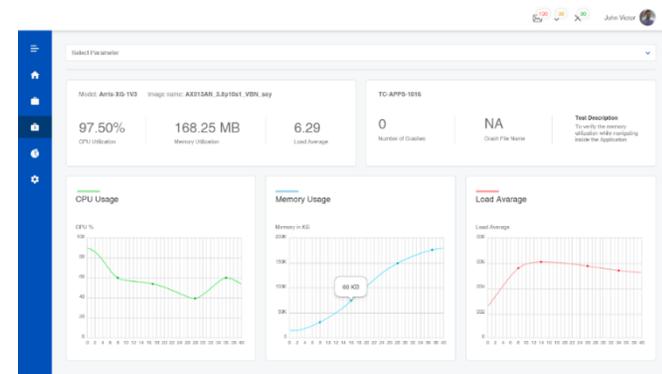
The customer is a telecommunications conglomerate based in Philadelphia, Pennsylvania, and the world's second-largest broadcasting and cable television company by revenue and the largest home Internet service provider in the United States.

BACKGROUND

The customer has a web-based test automation analytics tool that orchestrates automated verification of RDK builds against various set-top models and speeds up RDK build release. The software also helps with test planning, execution, analysis, and reporting.

There was a lot of information being communicated, and due to poor information organization and overwhelming visual feedbacks, the users experienced cognitive overload, affecting overall productivity and reliability. As a result, they desired to redesign the entire tool to maximize the full potential of the available information to improve overall performance.

I am interested to learn about UX services !



Enhanced data visualization

Rich and sophisticated data visualization designed specially for Job Managers to easily trigger executions, manage reports while mapping devices, view performance, status i.e health test results and reports.

The 'Execution Results' table provides a clear overview of test runs:

Image Name	Type	Total	Pass	Fail	RT	NR	NA	Start Date Time (EST)	End Date Time (EST)
MOTOROLA - RG1V3	applet	15	14	0	0	1	0	08/11/2016 02:34	08/11/2016 02:34
AXESIAN_3.8y10t1_VDR_jay - RG1V3	applet	15	14	0	0	1	0	08/SEP/2016 02:34	08/SEP/2016 02:34
AXESIAN_3.8y10t1_VDR_jay - RG1V3	applet	15	14	0	0	1	0	08/SEP/2016 02:34	08/SEP/2016 02:34

Buttons for 'Download List Report' and 'Download Detailed Report' are visible at the bottom.

Simplified, easy to use interface

Uncluttered layout with single click interactions for maximum usability. Ensuring visual consistency adhering to design guidelines set by Comcast.

PROJECT SCOPE

UX audit of existing application

Analysis of the existing interface to identify key problem areas for feature accessibility, usability, etc.

Defining key interactive insights and touchpoints to lay down the framework for the new experience

Simplifying layouts

Simplifying complex data and information to reduce cognitive load

Better organization of information on the screen

Simplifying feature accessibility

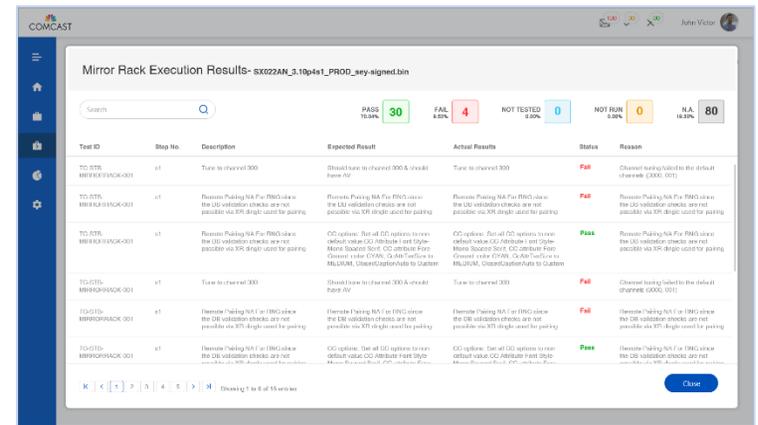
UX flows and design spec creation

Designing the information architecture showcasing the hierarchy of all functionalities and modules

Design of wireframes and Navigation Styles Exploration

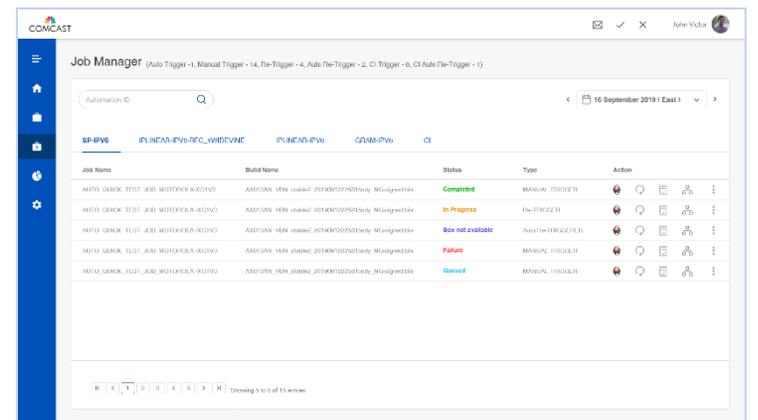
Adherence to visual guidelines

Visual design in accordance with Design guidelines set by Comcast to align the product with the brand and allow homogeneity across different Comcast products and platforms



Structured information clusters

Optimizing the use of available on-screen real estate to organize the information effectively, to ensure easy communication of information



Job Manager

Interface for Job managers to get the latest up to date job details and also enables them to assign a set of actions based on status updates with a single click

IMPACT

1

Reduced potential for error with simplified data communication

2

Improved operational efficiency with better information prioritization

3

Increased productivity with enhanced usability and feature accessibility

4

Optimizing Performance with clear data interpretation and reduced cognitive load on the user

5

Application modernization in accordance with brand homogeneity

For more information, please contact us by clicking [here](#).