BROADCOM®
MAINFRAME SOFTWARE

VSE's Blueprint for Achieving Formula One Success

Robert Dougherty
robert.dougherty@broadcom.com

Disclaimer

Certain information in this presentation may outline Broadcom's general product direction. This presentation shall not serve to (i) affect the rights and/or obligations of Broadcom or its licensees under any existing or future license agreement or services agreement relating to any Broadcom software product; or (ii) amend any product documentation or specifications for any Broadcom software product. This presentation is based on current information and resource allocations as of April 21, 2026, and is **subject to change or withdrawal by Broadcom at any time without notice**. **The development, release and timing of any features or functionality described in this presentation remain at Broadcom's sole discretion**.

Notwithstanding anything in this presentation to the contrary, upon the general availability of any future Broadcom product release referenced in this presentation, Broadcom may make such release available to new licensees in the form of a regularly scheduled major product release. Such release may be made available to licensees of the product who are active subscribers to Broadcom maintenance and support, on a when and if-available basis. The information in this presentation is not deemed to be incorporated into any contract.

Broadcom may use any feedback provided by you related to a Broadcom product or this presentation for any Broadcom business purposes (including but not limited to, preparation, reproduction, and distribution of derivative works based upon such feedback), without any obligation to you including consent or payment.

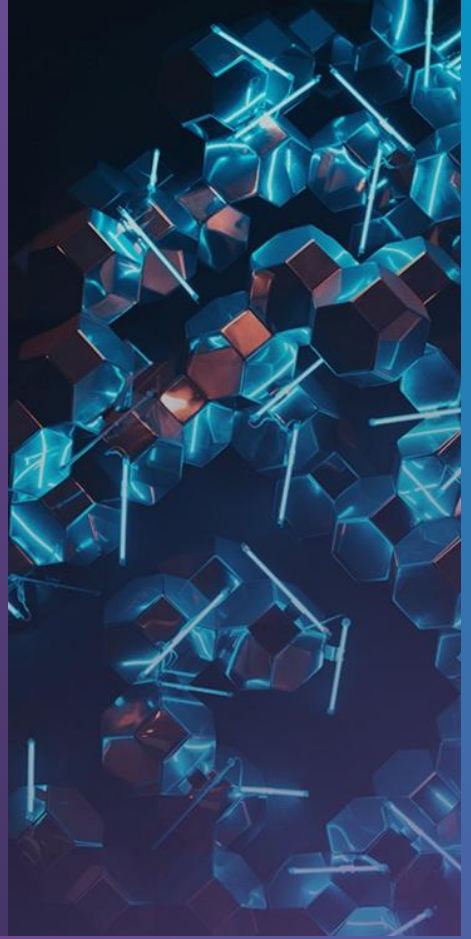
THIS PRESENTATION IS FOR YOUR INFORMATIONAL PURPOSES ONLY. Broadcom assumes no responsibility for the accuracy or completeness of the information. TO THE EXTENT PERMITTED BY APPLICABLE LAW, BROADCOM PROVIDES THIS DOCUMENT "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON INFRINGEMENT. In no event will Broadcom be liable for any loss or damage, direct or indirect, in connection with this presentation, including, without limitation, lost profits, lost investment, business interruption, goodwill, or lost data, even if Broadcom is expressly advised in advance of the possibility of such damages.

Introduction

- Are we running the F1 Car optimally
- Get Baseline for F1 Car’s Performance
- What to do with the Data Collected
- Making Improvements using the Data
- Security
- Data Storage & Recovery
- Disaster Recovery
- Continuous Monitoring & Improvements
- Conclusion

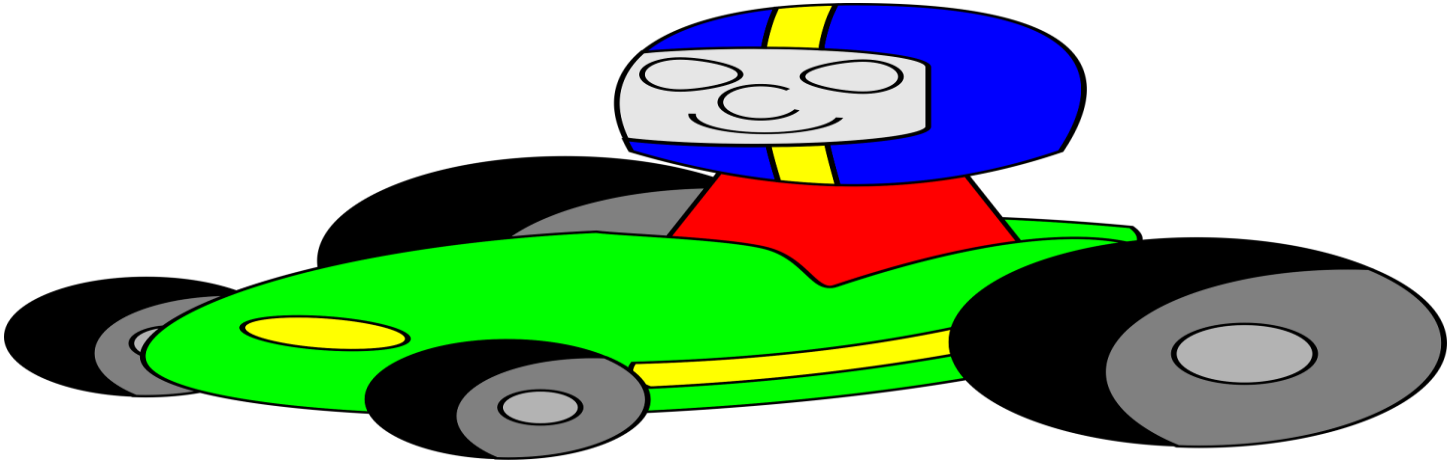
BROADCOM®
MAINFRAME SOFTWARE

Are we running the F1 car optimally?



Are we running the F1 Car optimally?

We built a F1 car but isn't winning.
Can we find out why?
What can we do to make it a winning F1 car?

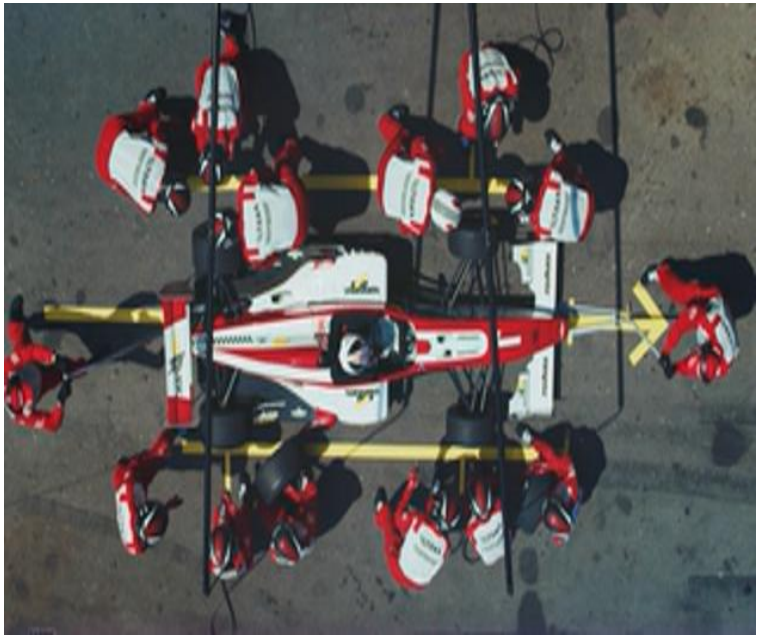


Get Baseline for F1 Car's Performance.

Initial lap times consistent but as the morning went on started noticing lap times increasing.

WHY?

For this we will use EXPLORE.



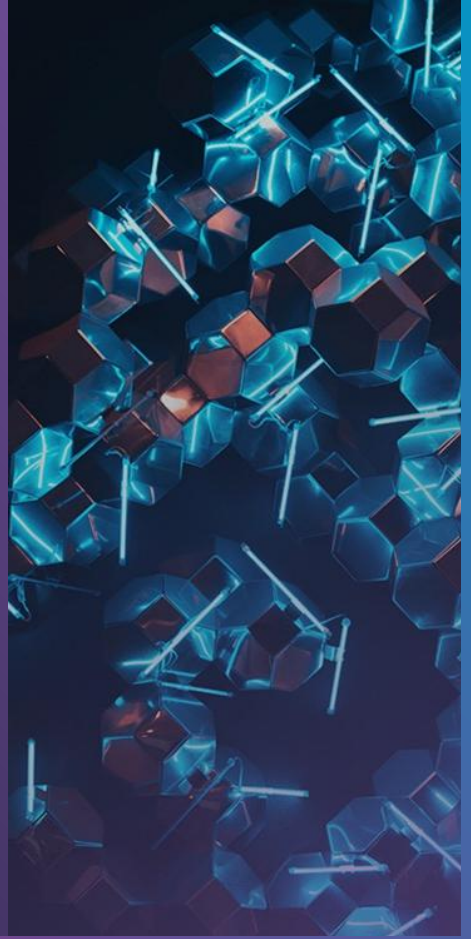
Set up Baseline for F1 Car’s Performance.

What’s the EXPLORE Data showing us?

Reviewing laps times. Loosing time in corners.

BROADCOM®
MAINFRAME SOFTWARE

What to Do with the Data Collected?



What to do with the Data Collected.

Need to know/understand what's going on at the track in the corners.

For this we will use FAQS/ASO (FAQS or ASO).

Real time view of the track, particularly at the corners.

What to do with the Data Collected.

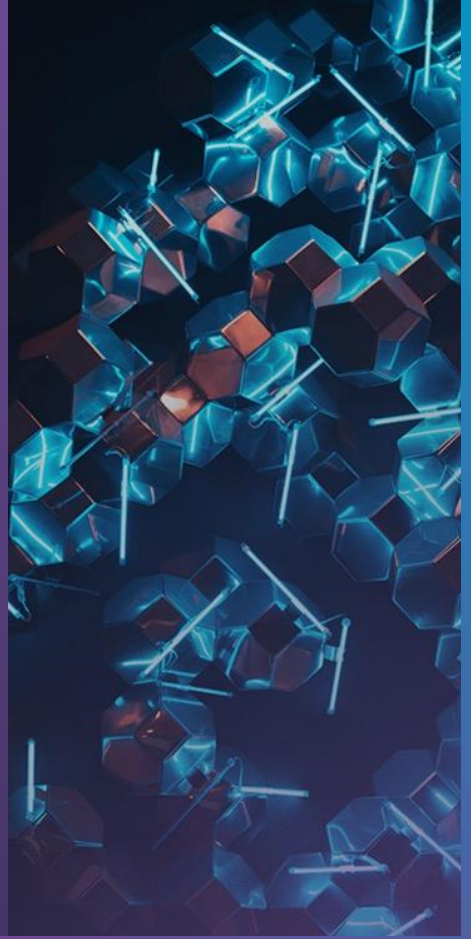
Congestion on the Track.

With this information we want to release the car at a better time, not so congested.

For this we will use FAQS/PCS (PCS).

BROADCOM®
MAINFRAME SOFTWARE

Make Improvements.



Make Improvements using the Data Collected.

Decongestion on the Track.

With Explore, ASO & PCS we find a perfect time to release our car, with minimum interference of other cars.

Collecting More Data, More Improvements.

The lap times are still inconsistent. PCS shows the car is not completing lap times within normal parameters.

EXPLORE indicates where the lack of performance is.

ASO is looking at the track to see what caused the issue. Debris!

PCS will again indicate the optimum time to release the car back on track.

Collecting Even More Data, Even More Improvements.

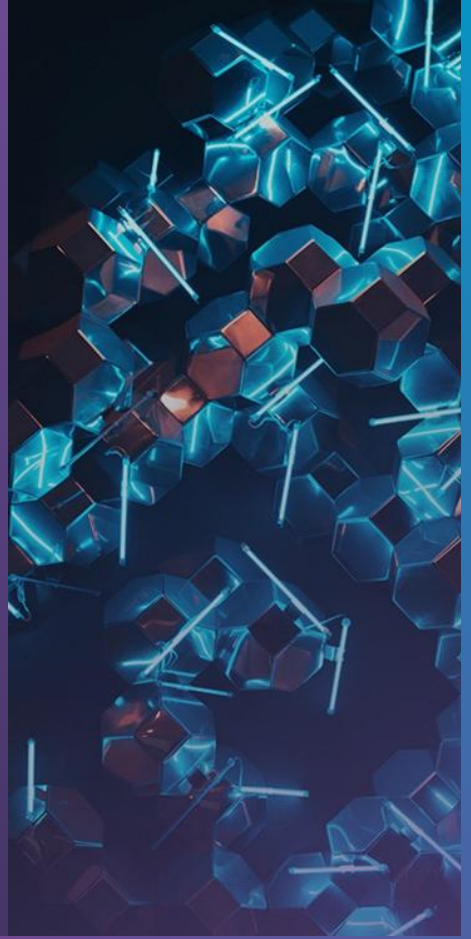
Can we get even more performance from the car?

For this we will use VSAMAID.

Monitor and recommend changes to the tire pressures. Changes to the transmission ratios. Changes to engine settings and exhaust settings.

BROADCOM®
MAINFRAME SOFTWARE

Security.



Secure the Data & Garage.

What about securing the Data?

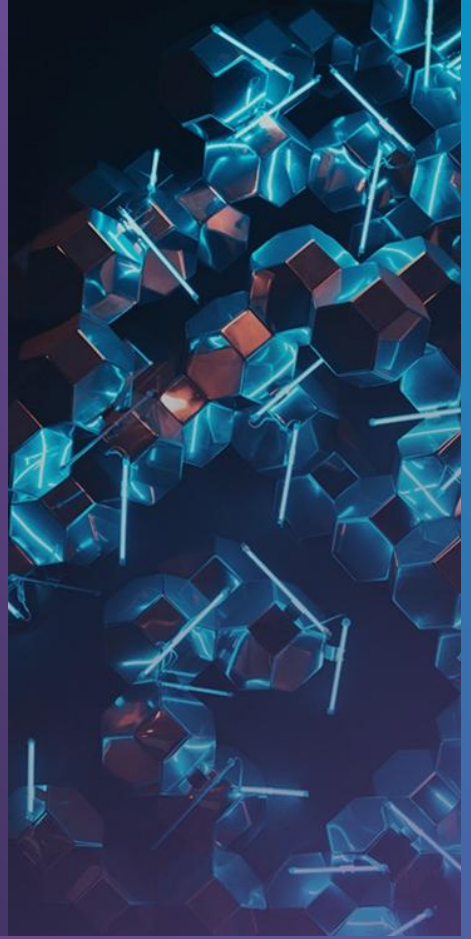
For this we will use TOP SECRET.

Access to only those we want to give it to. Like Race Control personnel.

Zero Trust: cross group security.

BROADCOM®
MAINFRAME SOFTWARE

Data Storage & Data Recovery.



Data Storage.

How do we keep track of all the telemetry that we are receiving?

For this we will use VOLLIE.

We want to track every lap and any changes made to the car. Using VOLLIE, we will put the data on a repository we can access later.

Data Recovery.

How can we keep the Telemetry for later use?

For this we will use FAVER2.

This will allow us to back up the telemetry.

Data Recovery.

How do we know what FAVER2 backup to use for what Telemetry/Lap?

For this we will use DYNAM.

DYNAM will track what FAVER2 backups is used and what Telemetry is where.

Data Recovery.

Changed Tire pressures. Did the car perform as well?

What can we use to determine this?

Can we go back to a previous tire pressure?

Disaster Recovery.

We see from PCS, ASO & EXPLORE that the car has come to an abrupt stop on the track. What happened? Can we find out?

Will the car need to be rebuilt from scratch!

Where do we start? How do we even put the car back together? Where's the sticky notes?

Designed by brgfx / Freepik

Disaster Recovery.

Don’t panic!

We saved everything with FAVER2. The question is, what backups do we need?

DYNAM knows where everything is!

Disaster Recovery – Data overrides

VSAMAID had a recommendation from the lap the crash occurred. Can we do a dynamic override rebuilding the car?

There's more.

Engineers noticed that they had missed a suspension issue a few laps back. They incorporated the changes into the FAVER2 overrides.

Why was this information overlooked?

Designed by brgfx / Freepik

Continuous Monitoring & Improvements.

To much telemetry going to the all groups. Is there a solution for this?

For this we will use DELIVER.

Only the required information for a particular group will be seen by them.

Continuous Monitoring & Improvements.

Race Control's compliance require the specs in spreadsheet format.

For this we will use EXPLORE REPORT WRITER.

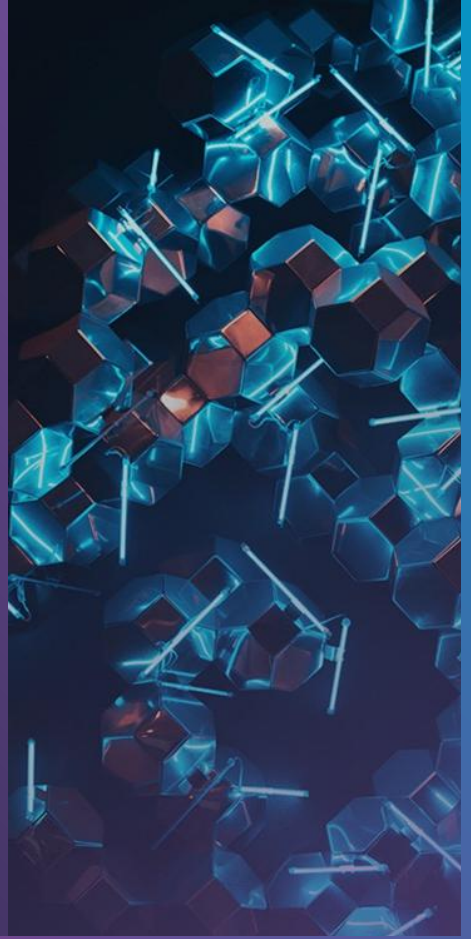
The Team Manager sent the Compliance report to Race Control in “.csv" format.

The car passed compliancy with flying colors!

Now for the RACE!

BROADCOM®
MAINFRAME SOFTWARE

A Winning F1 Car.

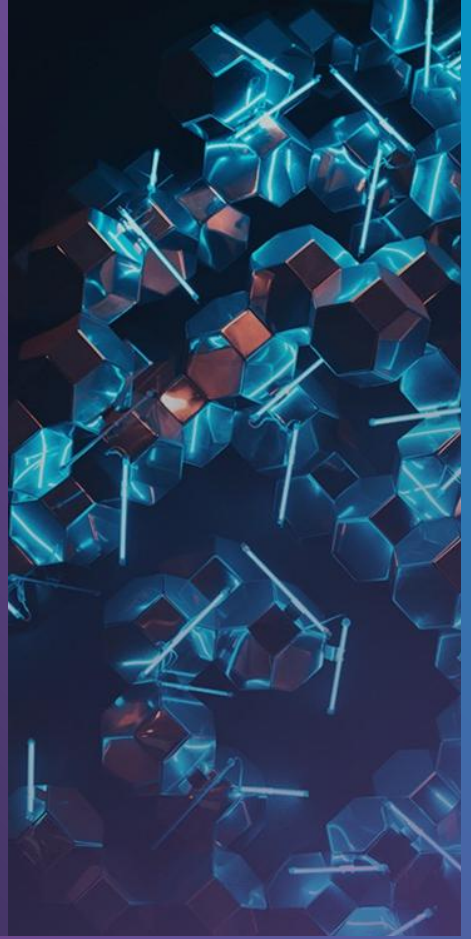


A Winning F1 Car.

With all this in place we were able to make the F1 car a winner! With continued monitoring & adjustments we can keep the car winning.

BROADCOM®
MAINFRAME SOFTWARE

Winning the Race with VSE Products.



Winning the Race with VSE Products.

EXPLORE can give indicators to what may be a cause of a bottle neck..

ASO is a console management and automation utility.

PCS is a comprehensive Job Scheduler.

Winning the Race with VSE Products

Winning the Race with VSE Products.

VSAMAID monitors VSAM File information and can be used to tune and improve VSAM File performance.

TOP SECRET secures access to OLTP, Transactions, Program, Files & Field level access. Also secures Batch Jobs in the same manner including VSE Library access.

VOLLIE is a repository for JCL, user data, program source & other types of data.

Winning the Race with VSE Products

Winning the Race with VSE Products.

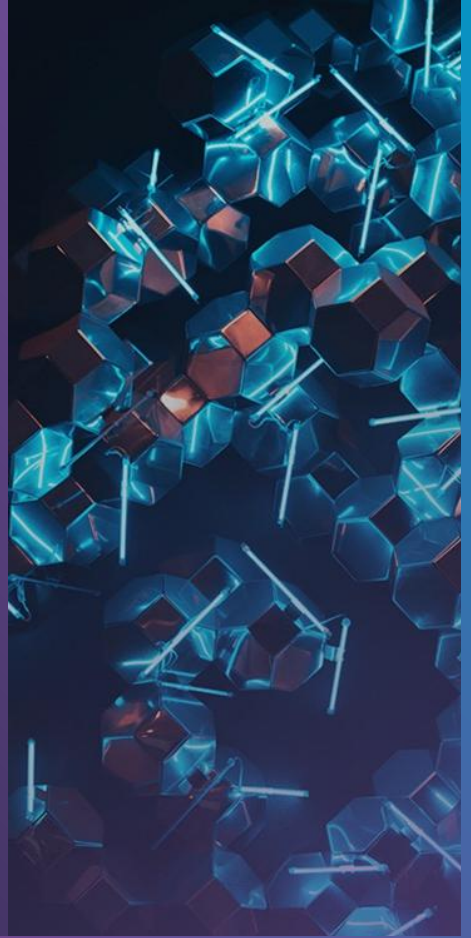
DYNAM allows automated control of Disk Space and Tapes.

FAVER2 is a VSAM File Backup and Restore utility.

EXPLORE REPORT WRITER allows reports to be configured from EXPLORE data. One of the output options is to write out a file in ".csv" format.

BROADCOM®
MAINFRAME SOFTWARE

Conclusion.



Conclusion.

Once you have your apps/system tuned you will see better throughput of Jobs and OLTP response times. Keep monitoring the data and you can have a performance winning system! Making the most of the resources you have and maybe even saving money.

Winning the Race with VSE Products

All images from PIXABAY unless otherwise noted.

Learn More

- *EXPLORE For VSE including EXPLORE Report Writer.*
- *FAQS/ASO & FAQS/PCS*
- *TOP SECRET*
- *FAVER2*
- *DYNAM*
- *VSAMAID*
- *Robert Dougherty Email: robert.dougherty@broadcom.com*
- *Jay Zelnick Product Manager (PM) Email: jay.zelnick@broadcom.com*

BROADCOM®
MAINFRAME SOFTWARE

Thank You

BROADCOM®

MAINFRAME SOFTWARE