

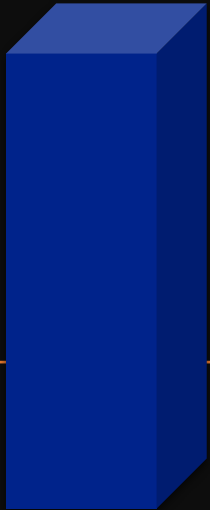


A PAGE TALKS ABOUT column

Tools,
Solutions &
Technologies

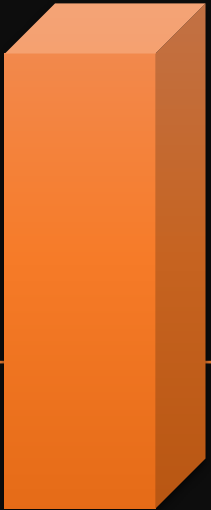


A PAGE TALKS ABOUT
column
@reWireByAutomation
Channel Objectives



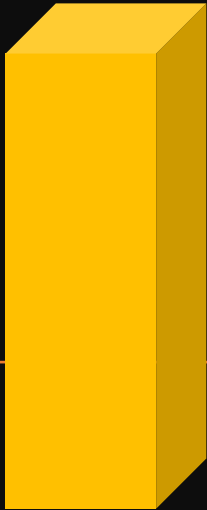
Tools ,
Solutions &
Technologies

My Workouts
speaks



Empowering
The Workforce

My Experience
speaks



Management/
Strategies

My Thoughts
speaks



Trends

My Analysis
speaks





A PAGE TALKS ABOUT
column

decode



By Selenium Manager

Driver & Browser



Automated

An Automation activity





Session 1 

PREFACE

Selenium Architecture Overview

Legacy Approach

Selenium Manager Glimpse

New Approach

Selenium Manager Features



Session 2 

MANAGEMENT

Driver Management



Browser Management



IMPLEMENTATION



Value Adds

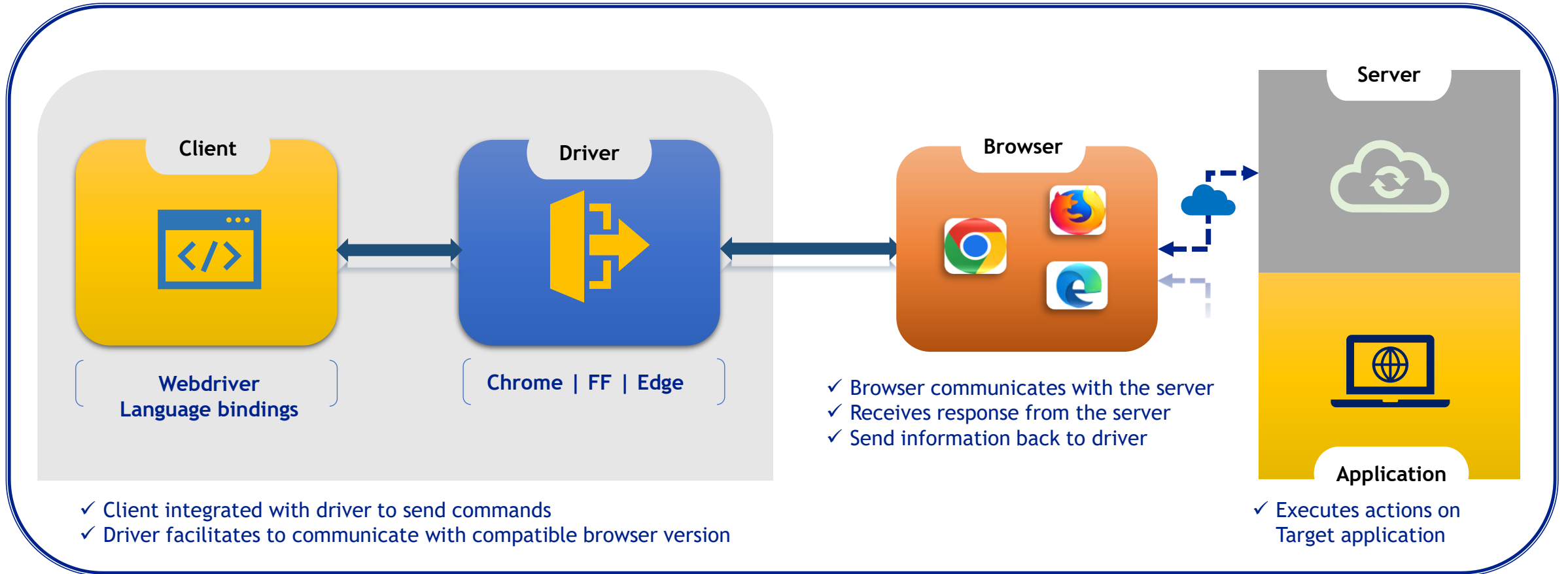


SELENIUM MANAGER

PREFACE




Selenium Architecture:

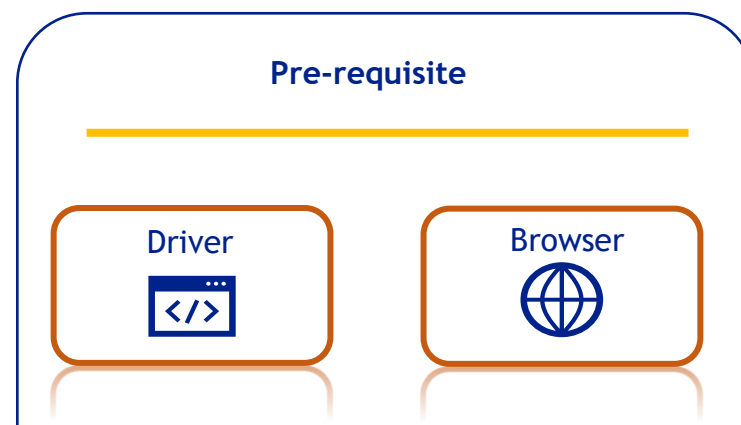




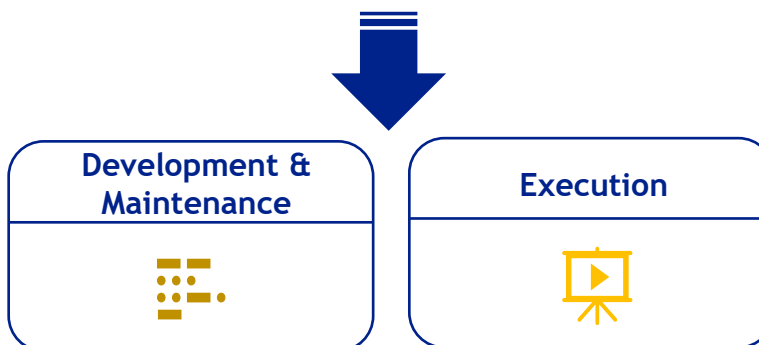
Driver & Browser Management:


Google Chrome
evergreen

- Chrome enabled by default
 - ✓ Upgrade automatically
 - in Silent mode
 - to stable version as soon as available
- Seamless Feature to end users
- Negative for Browser Automation



- ✓ Manual process to
 - check Browser version
 - check compatibility of driver version
 - download suitable driver
- ✓ Set driver path in the code / reference system path
- ✓ Reference path in the Selenium Grid
- ✓ Encounter exceptions in case of compatibility issues
- ✓ Manual attention is required



Legacy

- ✓ Process was designed to be manual
- ✓ Overall, it draws human attention
- ✓ This was continued until Selenium 4.5



Glimpse:

A CLI tool developed in **RUST** to support cross platform and works with Selenium supported language bindings



Introduced in the Selenium 4.6
> Started with Driver Management

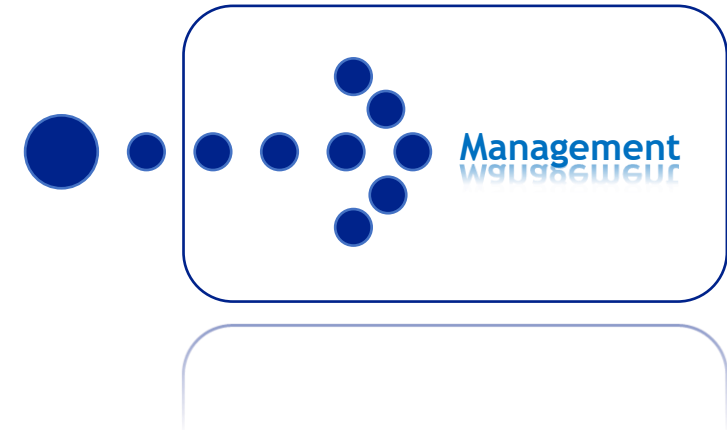
CLI



Silent Mode



Shipped by release





Driver & Browser Management: Driven by

Discover



Download



Cache

Auto Detection & JIT Management

Driver



Browser



- ✓ Selenium bindings invoke Selenium Manager
- ✓ Automated background process to
 - check Browser version
 - check compatibility of Browser driver version
 - download suitable Browser & driver
- ✓ No path references in the Code
- ✓ A simple flag to integrate with Selenium Grid
- ✓ Exception free auto mechanism in place

Development & Maintenance



Execution



New

DISCOVER | DOWNLOAD | CACHE


- ❖ “**Silent**” mode process is designed to be automated
- ❖ Unattended mode
- ❖ This was introduced in the Selenium Version 4.6.0 &
 - 113 chrome version

❖ Overall achieved

**EFFORTLESS BROWSER &
DRIVER MANAGEMENT**



Features:




Functions

Core Functions:


- ✓ Automated
 - ❖ Driver Management
 - ❖ Browser Management

Backed by:

- ✓ caching


Optional 

- ✓ Configuration
- ✓ Data collection




Platforms

- ✓ Windows
 - (x86 & x64 [32-bit & 64-bit OS])
- ✓ Linux (x64)
- ✓ Mac (x64 & aarch64 [Intel & Apple])




Compatibility

- ✓ Chrome
- ✓ Firefox
- ✓ Edge



Language Bindings

- ✓ All Selenium Supported Languages [Java, Javascript , Python , .Net & Ruby]



Grid

- ✓ Selenium Grid Integration
 - Management while Selenium Grid

`--selenium-manager true`

Note: Selenium grid Integration will be covered in upcoming stories in detail



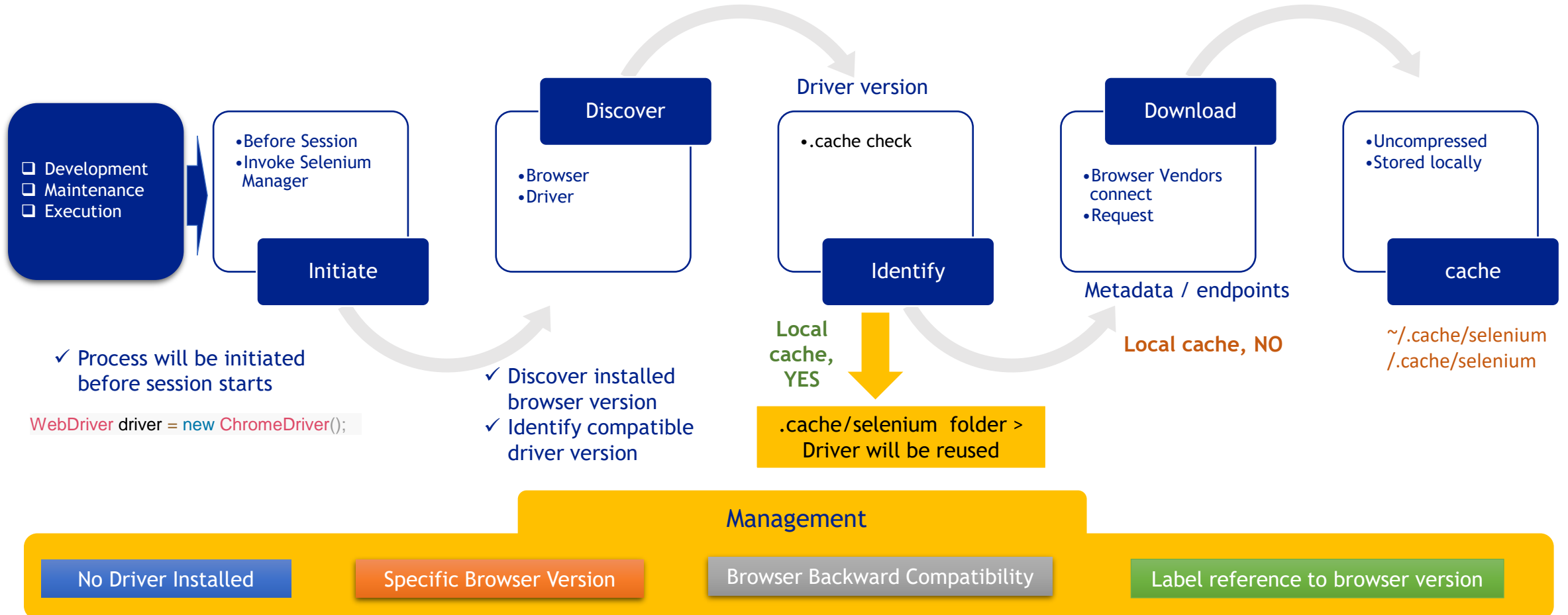
PREFACE ENDS



SELENIUM MANAGER FUNCTIONS

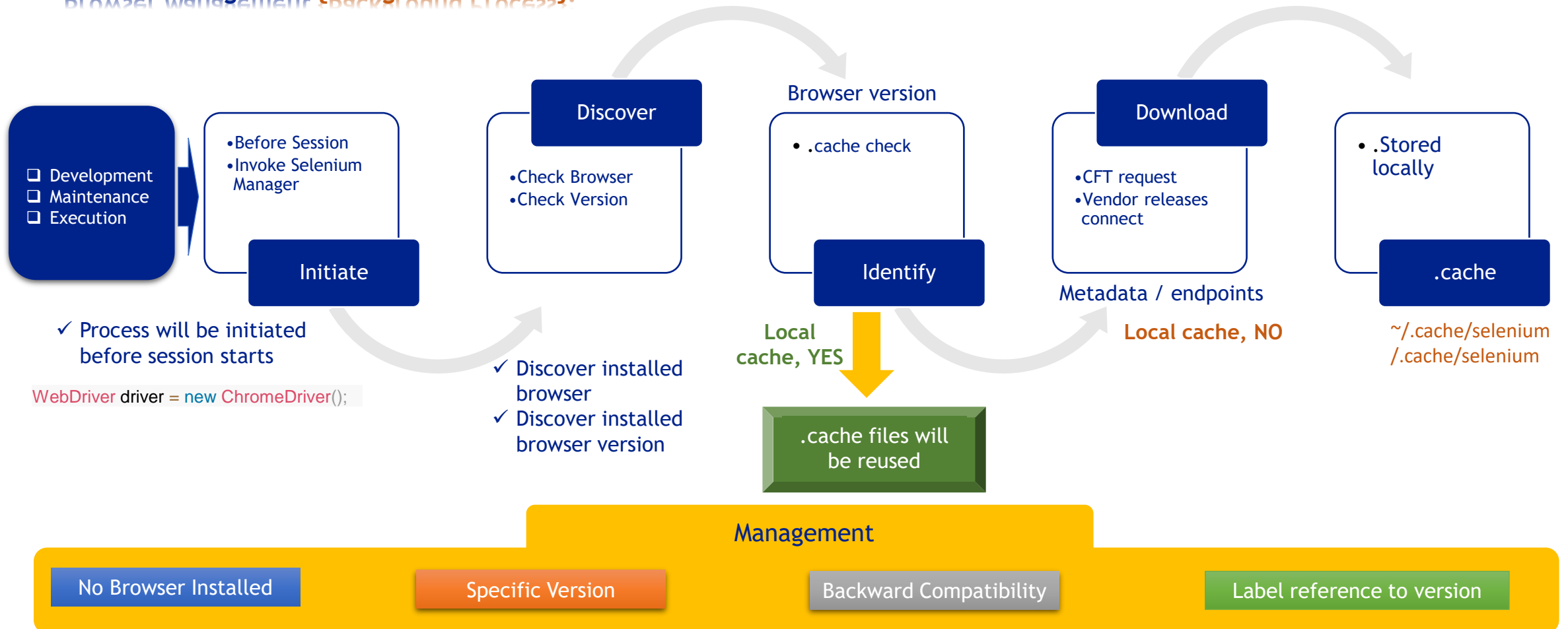


Driver Management {Background Process}:





Browser Management {Background Process}:





@Browser Management:

@ Browser	@ Releases	@ Selenium Version Onwards	@Browser Version Onwards
Chrome	Based on Chrome for Testing (CFT)	4.11.0	113
Firefox	Based on public Firefox releases	4.12.0	114
Edge	Based on Edge downloads	4.14.0	115

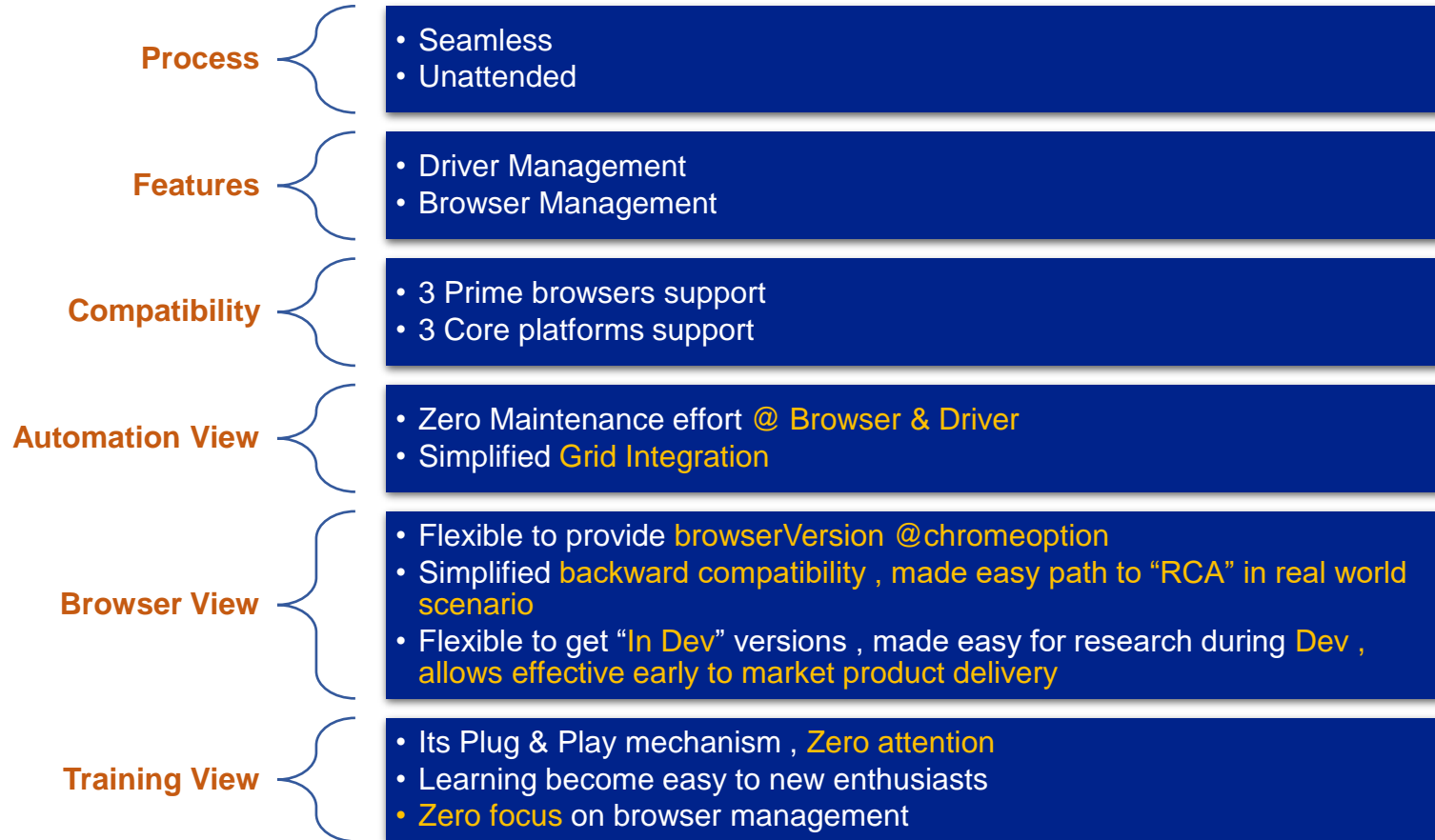
@browserVersion by label:

@ label	@ Description	@ label	@ Description	@ label	@ Description
stable	Current CfT Version	stable	Current stable release	stable	Current stable release
beta	Next version to stable	beta	Next version to stable	beta	Next version to stable
dev	Development version	dev	Development version	dev	Development version
canary	Nightly build for developers	nightly	Nightly build for developers	canary	Nightly build for developers
		esr	Extended Support Release		

Note: firstly, discover installed version if not browser is automatically managed



@Value Adds:



Exceptions To Note !

T
O
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T
E



Corporate environment may have restrictions to download

Enable proxy would resolve and allows to download [proxy capability](#)



Edge need Admin rights to install else below mentioned warning is displayed



edge can only be installed in Windows with administrator permissions

URLs

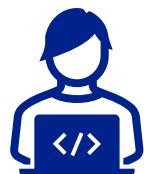
[Chrome for Testing \(CfT\)](#)

[Firefox Releases](#)

[Edge Download](#)






MANAGEMENT ENDS



SELENIUM MANAGER IMPLEMENTATION



Workouts:

 Chrome	 Firefox	 Edge
No Driver	No Driver	No Driver
Backward Version	Specific Version	
In Dev Version	esr	



IMPLEMENTATION ENDS



Resources

Repo	URL
GitHub	Selenium Manager - Implementation
Guide	Selenium Manager Guide





reWire

fueled by decode