

Introduction to IBM i Merlin

Edmund Reinhardt



Modernization Engine for Lifecycle Integration

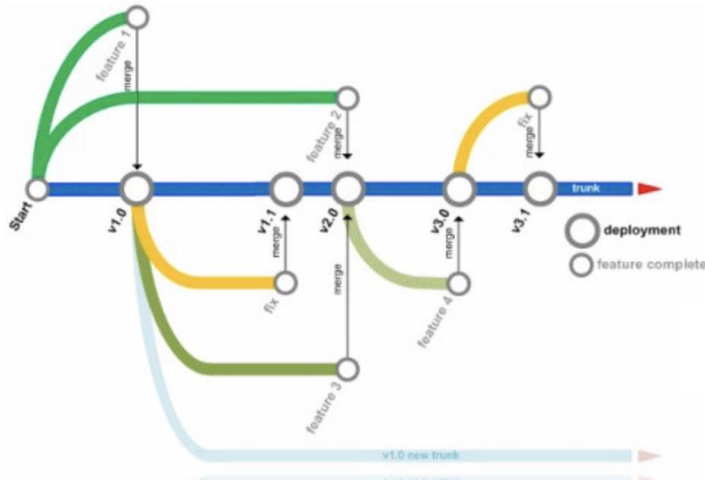


A safe, secure IBM i focused modern development ecosystem

What Issues does Merlin Help Solve



Modern / Centralized Source Control and Branching



Modern RPG

```
ctl-opt bnddir('ACCRCV');
dcl-f custfile usage(*update);
dcl-ds custDs likerec(custRec);
dcl-f report printer;

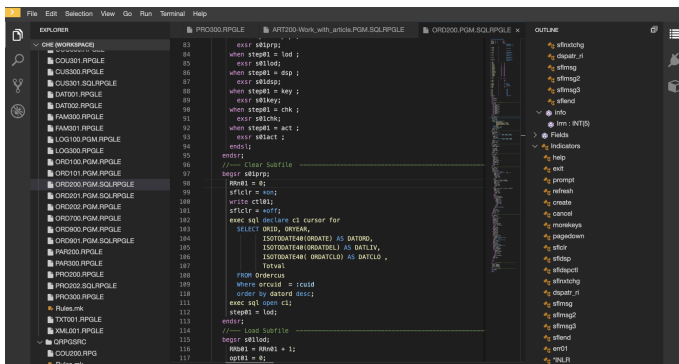
read custfile custDs;
dow not %eof;
  if dueDate > %date(); // overdue?
    sendOverdueNotice();
  write reportFmt;
  exec sql insert :name, :duedate into
    mylib/myfile;
```



- Fixed to Free
- Refactoring

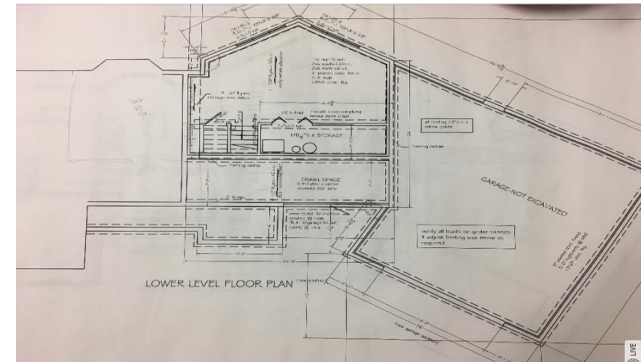


Browser Centric VsCode Based IDE



- Outline View
- Tokenization
- Content Assist
- Code formatting
- Understand Languages
 - RPG
 - SQL
 - Embedded SQL
 - CL
 - Cobol
 - DDS

Application Blueprint

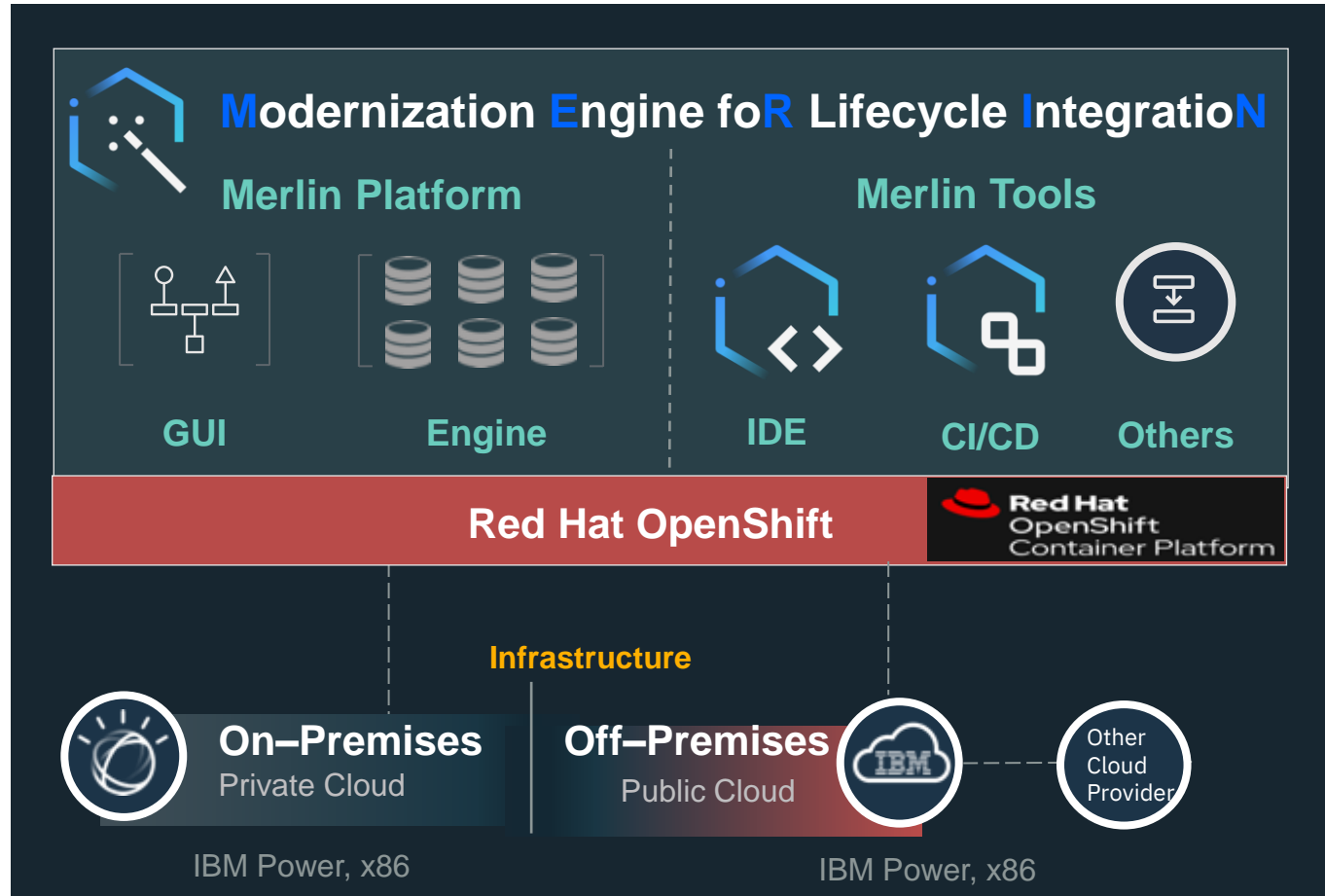


- Impact Analysis
- Program Understanding
- Data Usage
- Pgm Flow





Merlin



What is it ? Today

IBM Developer - IDE

Pipelines for All – CI/CD

Merlin the engine / framework



Modern Browser based developer environment

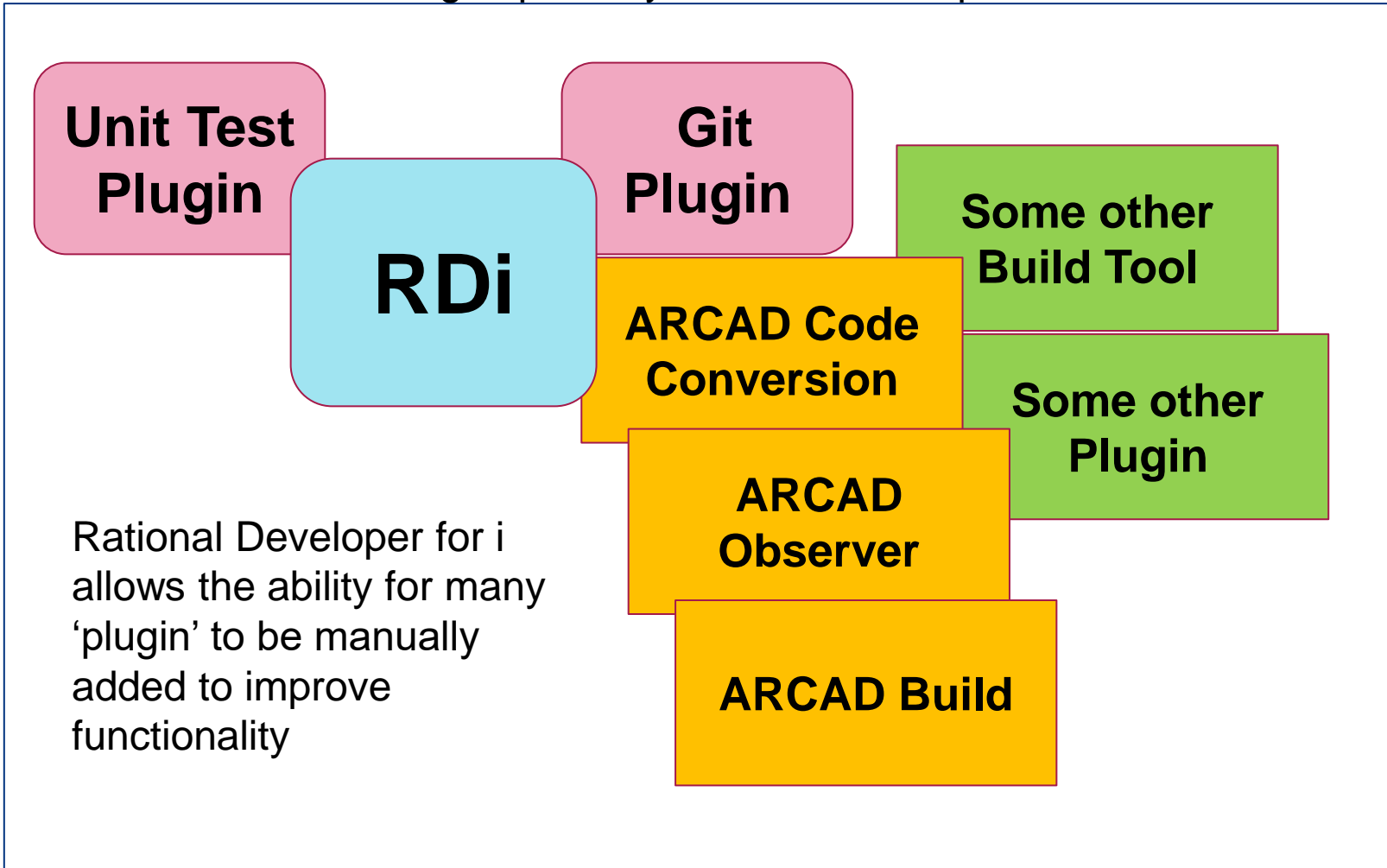
```

83      exsr s01prp;
84      when step01 = lod ;
85          exsr s01lod;
86      when step01 = dsp ;
87          exsr s01dsp;
88      when step01 = key ;
89          exsr s01key;
90      when step01 = chk ;
91          exsr s01chk;
92      when step01 = act ;
93          exsr s01act ;
94      endsl;
95  endsr;
96  //--- Clear Subfile -----
97  begsr s01prp;
98      RRn01 = 0;
99      sflclr = *on;
100     write ctl01;
101     sflclr = *off;
102     exec sql declare c1 cursor for
103         SELECT ORID, ORYEAR,
104             ISOTODATE40(ORDATE) AS DATORD,
105             ISOTODATE40(ORDATDEL) AS DATLIV,
106             ISOTODATE40( ORDATCLO) AS DATCLO ,
107             Totval
108         FROM Ordercus
109         Where orcuid = :cuid
110         order by datord desc;
111     exec sql open c1;
112     step01 = lod;
113  endsr;
114  //--- Load Subfile -----
115  begsr s01lod;
116     RRb01 = RRn01 + 1;
117     opt01 = 0;
  
```

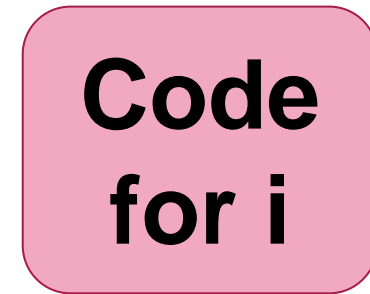
- Outline View
- Tokenization
- Content Assist
- Code formatting
- Understand Languages
 - RPG
 - SQL
 - Embedded SQL
 - CL
 - Cobol
 - DDS
- Impact Analysis
- Intelligent Build
- Full Git Integration
- Debugger

Today

All running separately on each developer PC

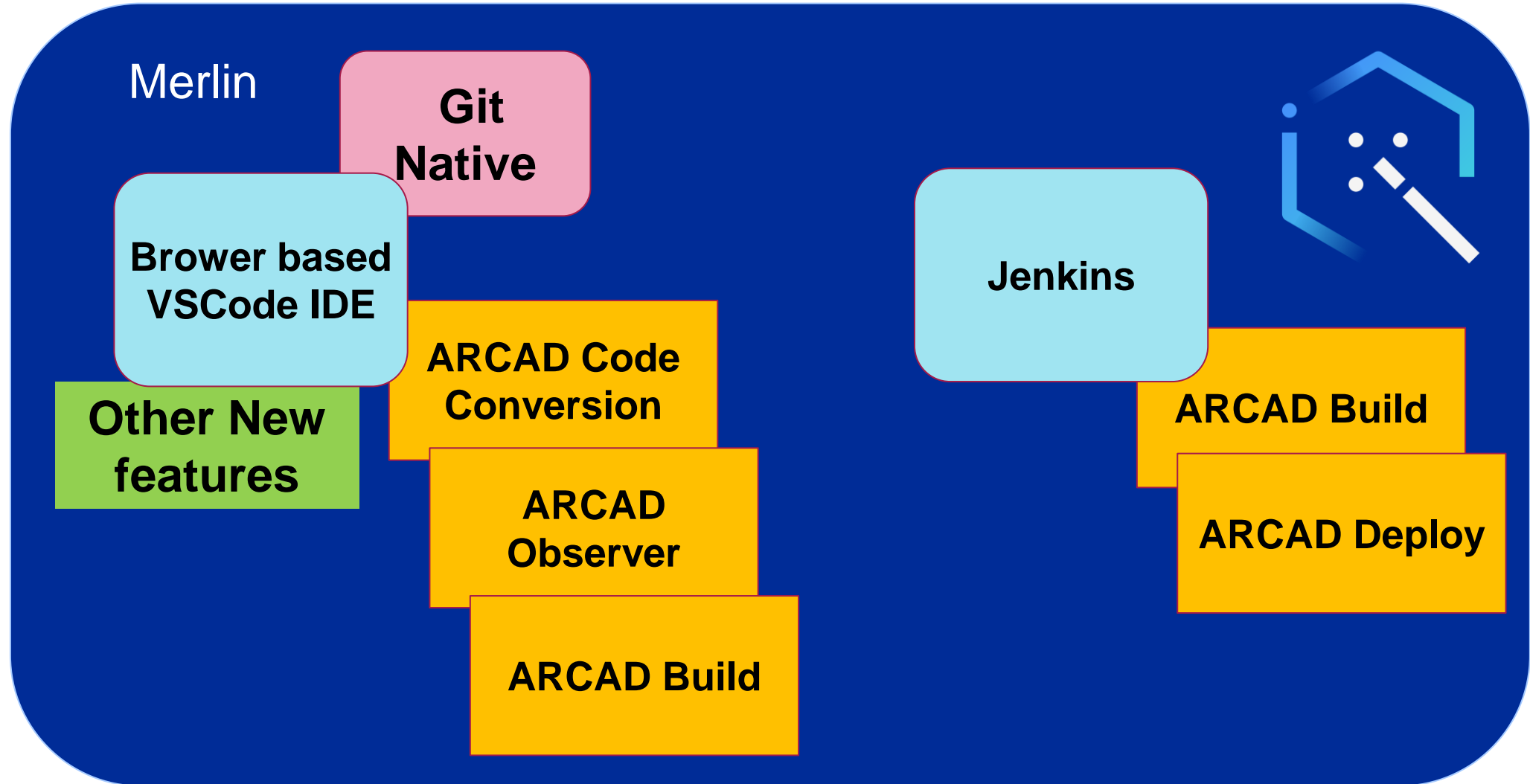


SEU – No plugins can be added



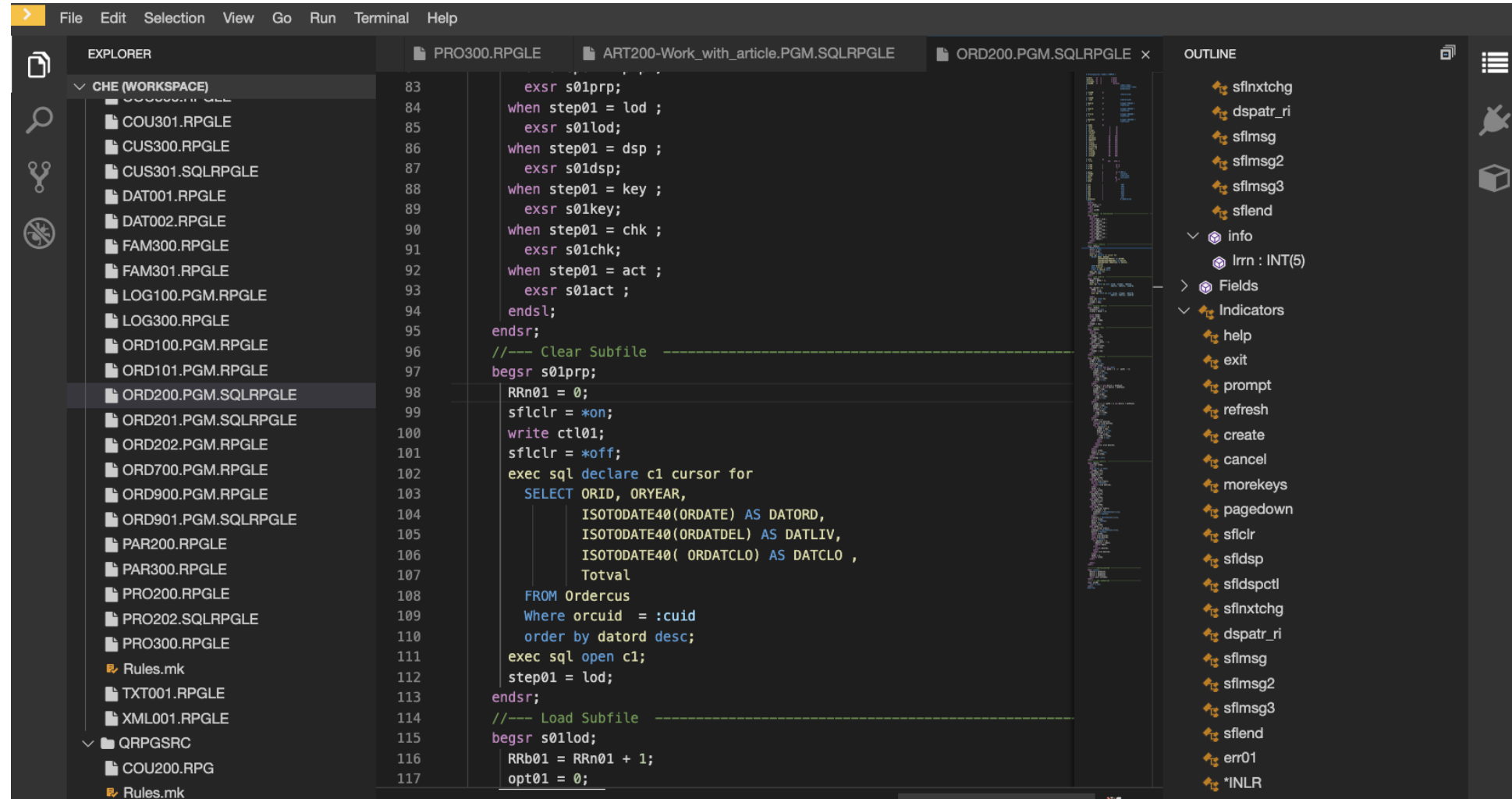
Plugin can be added....TBD

In all cases, additional function / features are all manually added, and no unified support



A single interface from IBM and fully supported by IBM, combining the key features required for modern IBM i Development

IBM Developer – The Merlin IDE



- Outline View
- Tokenization
- Content Assist
- Code formatting
- Understand Languages
 - RPG
 - SQL
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 - Cobol
 - DDS

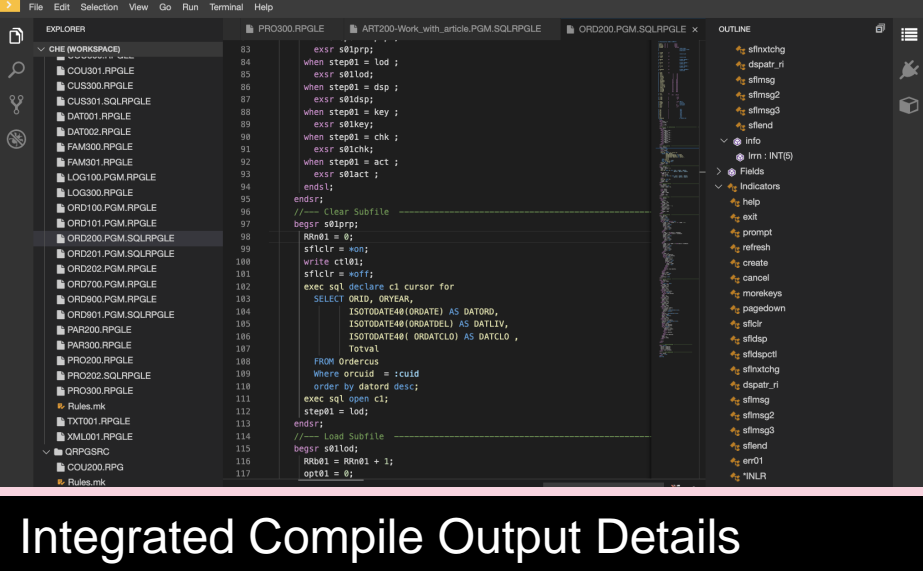
IBM Developer – The Merlin IDE



Compile a single program or Build an Application

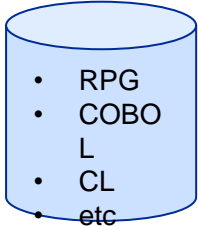
Code Ready Workspace

Favorite Browser



Integrated Compile Output Details

Git Source Repository



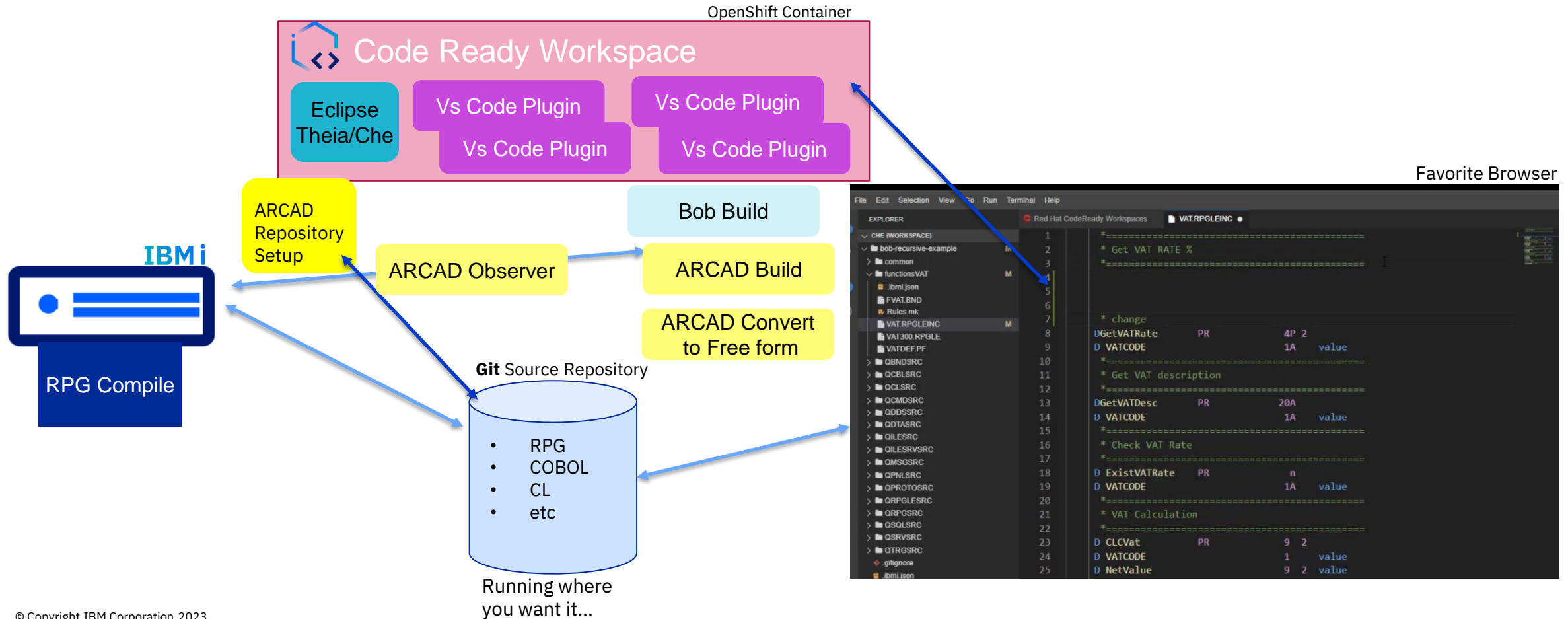
IBM i

RPG Compile

IDE - Today



- Setup your development environment
- Rich editing capability
- Build / Compile your project





Types of 'builds'

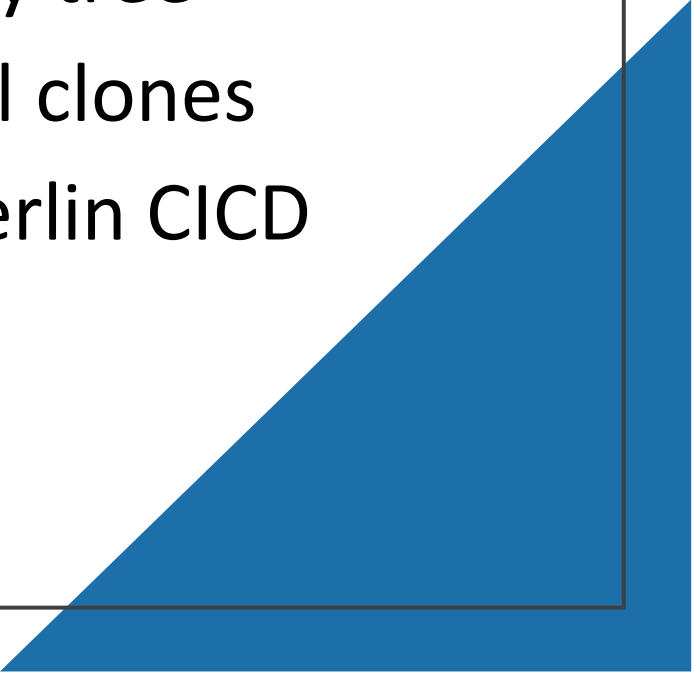
Build

- Build of entire application, or
- Build of specific portion of application (e.g. a display file and any dependent programs)

Compile

- Compilation of a specific sources without the need of launching larger build

ARCAD Builder

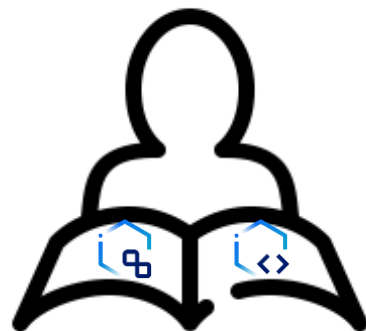
- Automatically detects projects dependency tree
 - Highly optimized smart builds and minimal clones
 - Integrated into Jenkins, Merlin IDE and Merlin CICD
- 
- A solid blue triangle is positioned in the bottom right corner of the slide, pointing towards the top right.



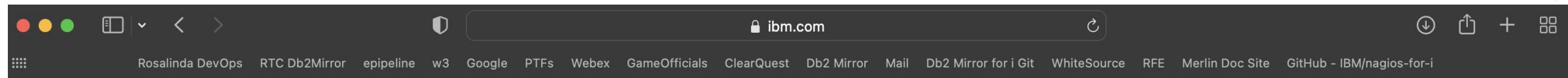
- Demo Time



Where can I Learn More about Merlin ?



Merlin Product Page



Search



<https://www.ibm.com/products/ibm-i-merlin>

IBM i Modernization Engine for Lifecycle Integration

A development and modernization environment for IBM i applications

Let's talk 



IBM i Merlin

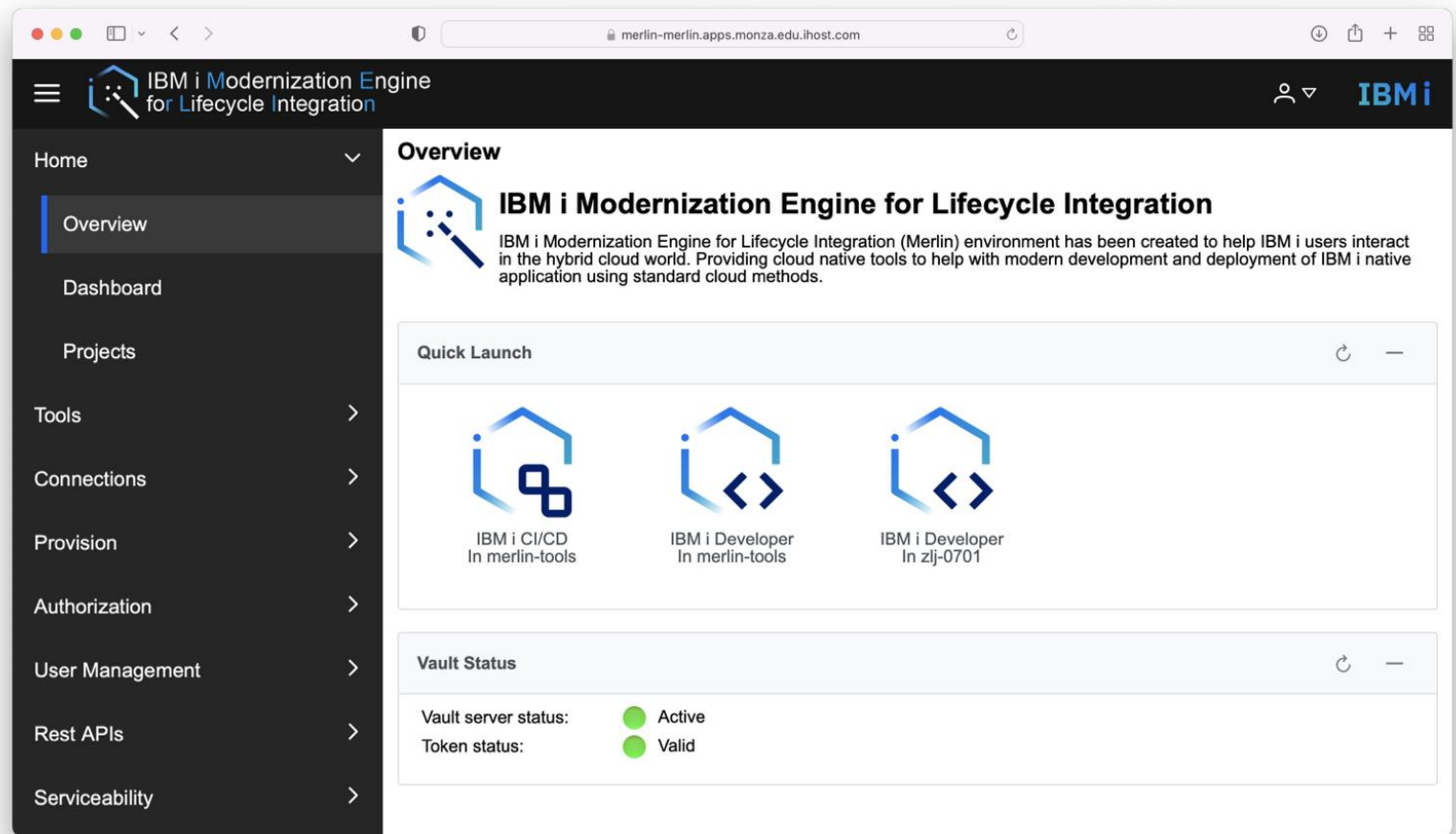
The coolest IBM product since ADDPFM

Get Started

Modern Documentation
Hosted on IBM GitHub
Targeted for Hands on Usage

<https://ibm.github.io/merlin-docs/#/>

- Overview
 - Merlin
 - Platform
 - FAQs
- Source control
 - Moving into git
- OpenShift
 - Requirements (todo)
 - IBM Entitlement
 - Installing Merlin
- Merlin
 - App Installation
 - Configuration
 - Basic Flows
- Merlin IDE
 - Usage
 - ARCAD
- Merlin CICD
 - Usage & Jenkins
 - ARCAD Builder
 - ibmi-bob



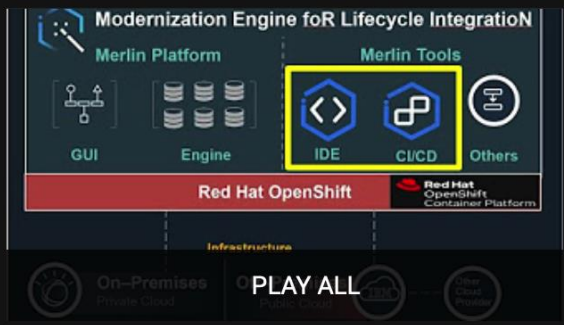
IBM i Modernization Engine for Lifecycle Integration (Merlin) is a set of tools run in OpenShift containers which guide and assist software developers in the modernization of IBM i applications, allowing them to realize the value of a hybrid cloud, multi-platform DevOps implementation.

<https://ibm.github.io/merlin-docs/#/>

Getting started videos



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Merlin - Modernization Engine for Lifecycle Integration

8 videos • 587 views • Updated 5 days ago



- IBM i Modernization Engine for Lifecycle Integration (Merlin) Demo**
ARCAD Software
11:52
- Merlin IDE Editing Tour**
ARCAD Software
6:43
- Merlin IBM i Developer Build Demo**
ARCAD Software
5:05
- Merlin Webcast - Cloud-based Application Development and Modernization on IBM i**
ARCAD Software
50:21

https://www.youtube.com/watch?v=-Y_TBb9zV9w

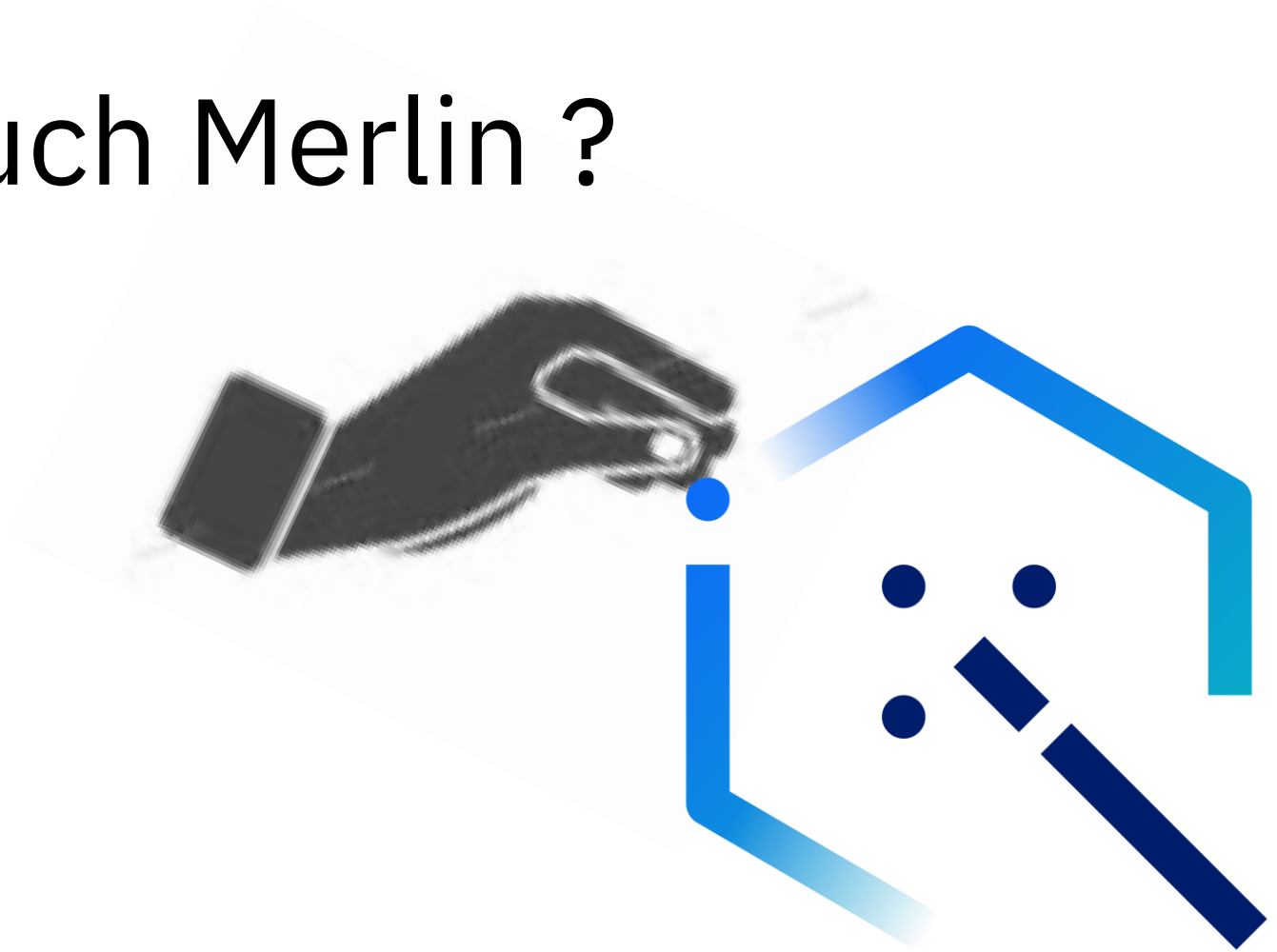
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ARCAD Software [SUBSCRIBE](#)

- How To Create a Merlin project from an existing GitHub repository**
ARCAD Software
3:18



Best way to touch Merlin ?



Merlin Testdrive



- Public Access
- Pre-Set up
- Place to touch Merlin and get a feel for it
- Pre-Defined RPG App for Edit and Build Purpose
- Not intended for POC
- Requires an Opportunity number



Merlin

<https://ibm.github.io/merlin-docs/#/./guides/overview/sandbox>

IBM i Modernization Engine for Lifecycle Integration (Merlin) Test Drive

- **Overview**
- This offering provides short-term access to a pre-configured IBM i Merlin environment.

IBM i



- **Target Audience**
- Tech-Sellers and Business Partners who wish to provide a hands-on experience to their clients with the IBM i Merlin product, to help advance an IBM Power opportunity.
- **IBM i Experience is recommended.**
- Clients can participate with their Tech-Seller requesting the offering.
- IBM i development provides support to your client.
- Client Engineering for Systems supports the systems and infrastructure.
- Do you need access to an environment to showcase IBM i Merlin, and to provide a client hands-on access?
- If so, this offering may be what you're looking for!

Value Proposition

- Realize the value of a hybrid cloud, multi-platform DevOps implementation.
- Gain hands-on experience with the technology.
- A self-guided tour and sample code are provided.
- Leverage, test, and / or demonstrate IBM i Merlin.
- The user is provided an OpenShift Merlin Workspace and a dedicated IBM i partition.
- IBM Client Engineering for Systems provides the infrastructure, IBM i Development provides the Merlin expertise, while you bring your client.
- VPN Access is provided to remotely access the environment; for the IBM Tech-Seller, BP, and for the client.



- **Duration**
 - Up to one week.
- **Environment Limitations**
 - This is not instructor led training or education.
 - This is not a custom PoC environment.
 - You are not to load HIPAA or PHI data on the IBM systems.
- **Contacts**
- Contact us at ce4s@ibm.com

(Please include an associated ISC Opp#, and a comment in the form that you're requesting "IBM i Merlin" access.)

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