Application Discovery

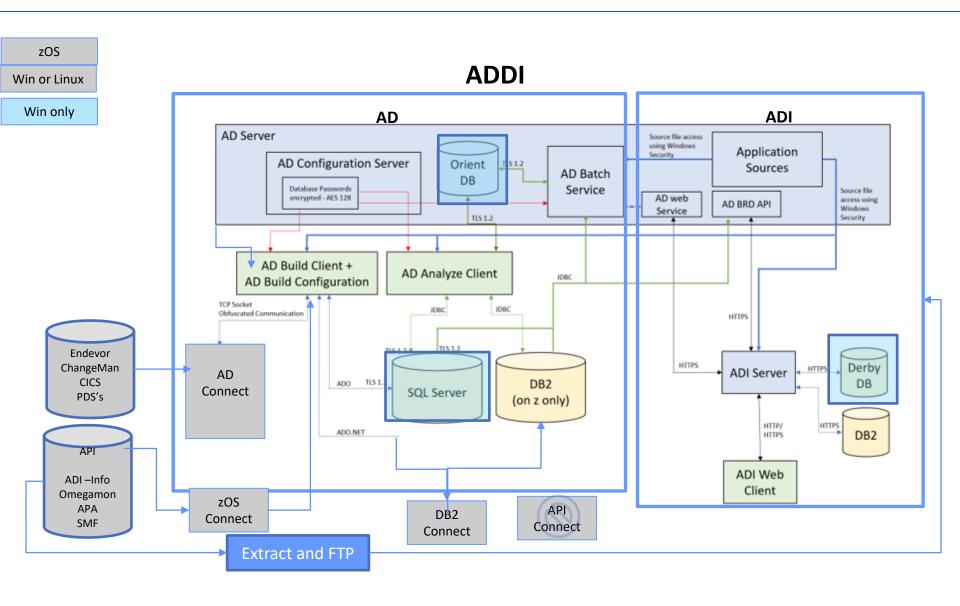
ADMINISTRATION for ADDI 6.0.1

TOPICS

- OVERVIEW OF APPLICATION DISCOVERY
- BUILD CLIENT
- BUILD CONFIGURATOR
- SYNCHRONIZATION AND BUILD IN BATCH MODE
- INSTALLATION OF SERVER AND ANALYZE CLIENT PLUGIN
- DASHBOARD AND OPERATION



APPLICATION DISCOVERY ARCHITECTURE





APPLICATION DISCOVERY SERVICES

- BATCH SERVER
- GRAPHICS DATABASE
- CONFIGURATION ADMIN SERVICE
- CONFIGURATION SERVICE
- FILE SERVICE
- RESOLUTIONS SERVICE
- CROSS APPLICATION SERVICE
- SEARCH SERVICE

APPLICATION DISCOVERY CLIENTS

- ECLIPSE OR IDz ANALYZE CLIENT
- WINDOWS-ONLY BUILD CLIENT

APPLICATION DISCOVERY REPOSITORY

- SQL Server, or
- DB2 zOS or LUW

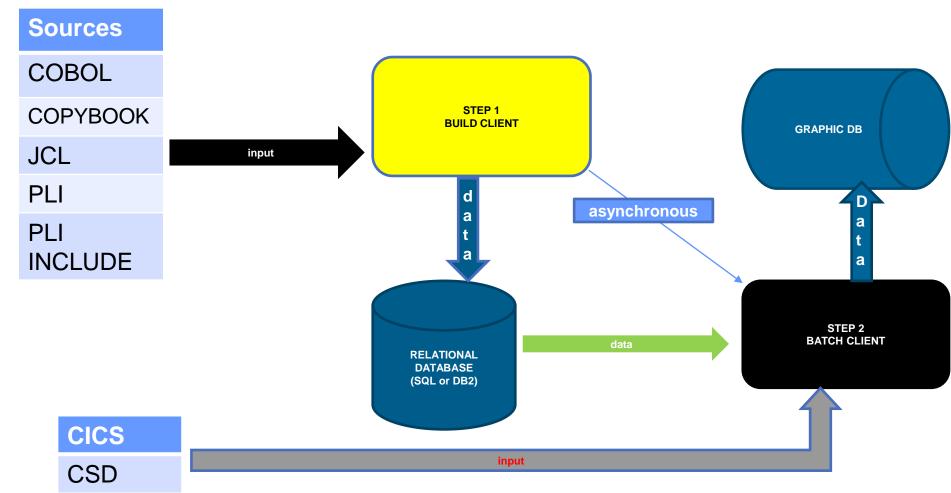
TASKMGR OUTPUT

Fewer details | Open Services

Processes Performance Users Details Services					
Name	PID	Description	Status	Group	
LanmanWorkstation	2392	Workstation	Running	NetworkService	
LanmanServer	3772	Server	Running	smbsvcs	
KtmRm		KtmRm for Distributed Transaction Coordinator	Stopped	NetworkServic	
KPSSVC		KDC Proxy Server service (KPS)	Stopped	KpsSvcGroup	
Keylso	708	CNG Key Isolation	Running		
KdsSvc		Microsoft Key Distribution Service	Stopped		
Kdc	708	Kerberos Key Distribution Center	Running		
IsmServ	2092	Intersite Messaging	Running		
iphlpsvc	2832	IP Helper	Running	NetSvcs	
InstallService		Microsoft Store Install Service	Stopped	netsvcs	
IKEEXT		IKE and AuthIP IPsec Keying Modules	Stopped	netsvcs	
icssvc		Windows Mobile Hotspot Service	Stopped	LocalServiceN	
IBMApplicationDiscoveryWebSphereLibertyProfileService	900	IBM Application Discovery WebSphere Liberty Profile Service	Running		
BMApplicationDiscoveryWebService	11012	IBM Application Discovery Web Service (IBMApplicationDiscoveryWeb	Running		
IBMApplicationDiscoveryValidationServer		IBMApplicationDiscoveryValidationServer	Stopped		
IBMApplicationDiscoverySearchService	3640	IBM Application Discovery Search Service	Running		
BMApplicationDiscoveryManualResolutionService	2556	IBM Application Discovery Manual Resolution Service	Running		
BMApplicationDiscoveryMainframeProjectsService	4104	IBM Application Discovery Mainframe Projects Service	Running		
BMApplicationDiscoveryGraphDBService	3104	IBM Application Discovery GraphDB Service (IBMApplicationDiscovery	Running		
BMApplicationDiscoveryFileService	3088	IBM Application Discovery File Service	Running		
BMApplicationDiscoveryCrossApplicationsService	1060	IBM Application Discovery Cross Applications Service	Running		
BMApplicationDiscoveryConfigurationService	3232	IBM Application Discovery Configuration Service (IBMApplicationDisco	Running		
BMApplicationDiscoveryConfigurationAdminService	3128	IBM Application Discovery Configuration Admin Service (IBMApplicati	Running		
BMApplicationDiscoveryBatchService	4128	IBM Application Discovery Batch Service (IBMApplicationDiscoveryBat	Running		
BMApplicationDiscoveryAnalyzeService	2964	IBM Application Discovery Analyze Service (IBMApplicationDiscoveryA	Running		
BM Application Discovery and Delivery Intelligence Service	. 2660	IBM Application Discovery and Delivery Intelligence Service Manager	Running		
HvHost		HV Host Service	Stopped	LocalSystemN	
hidserv		Human Interface Device Service	Stopped	LocalSystemN	
gupdatem		Google Update Service (gupdatem)	Stopped		
agupdate gupdate		Google Update Service (gupdate)	Stopped		

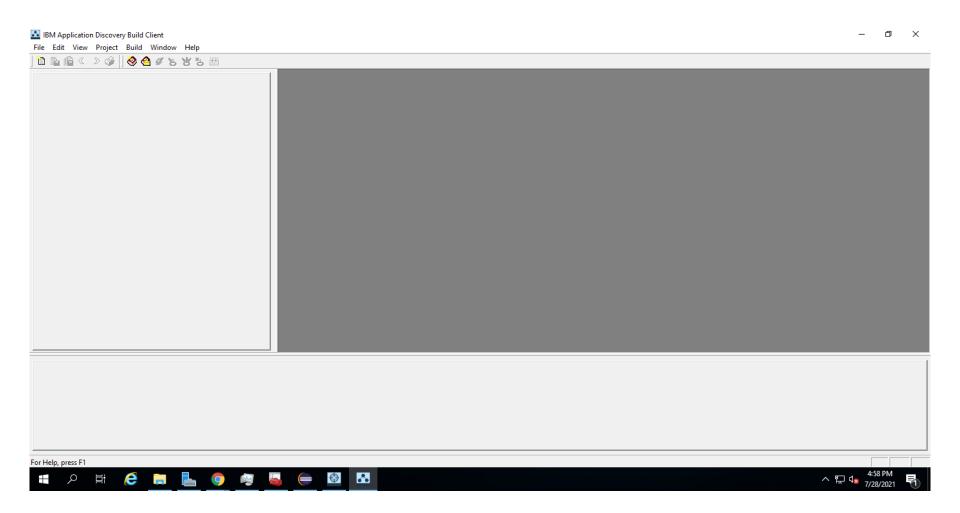


BUILD PROCESS



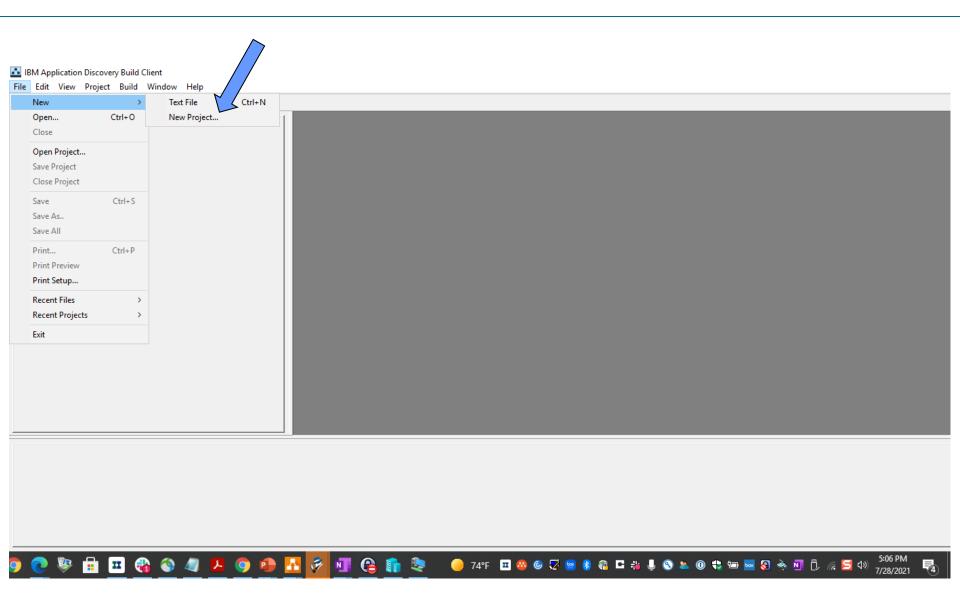


BUILD CLIENT



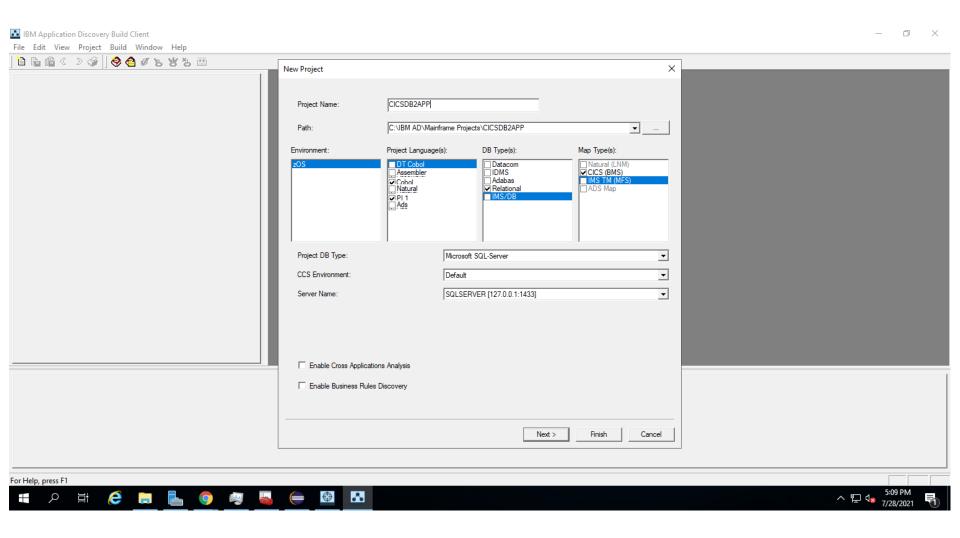


BUILD NEW PROJECT



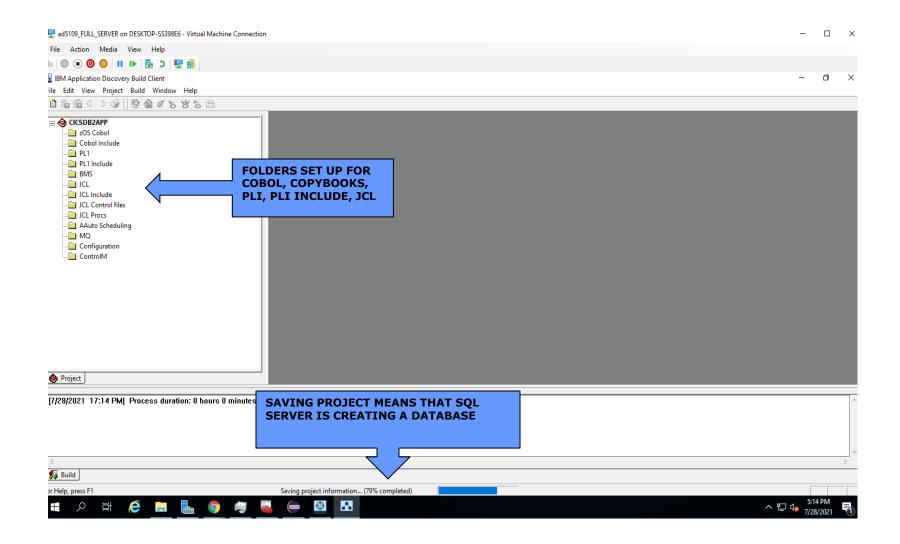


BUILD COBOL, PLI, DB2, CICS APPLICATION





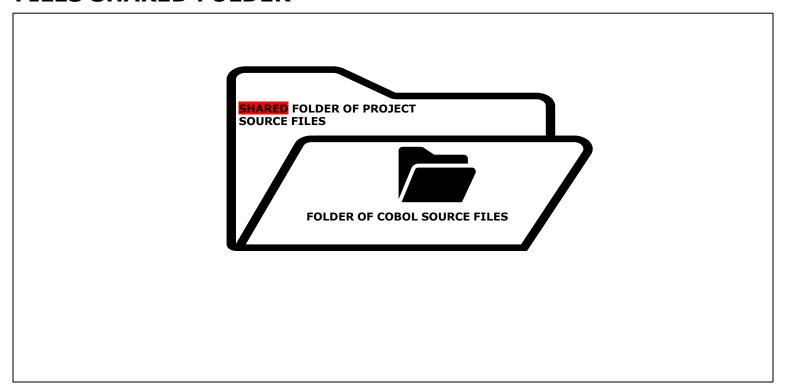
NEW PROJECT CREATING A DATABASE IN SQL





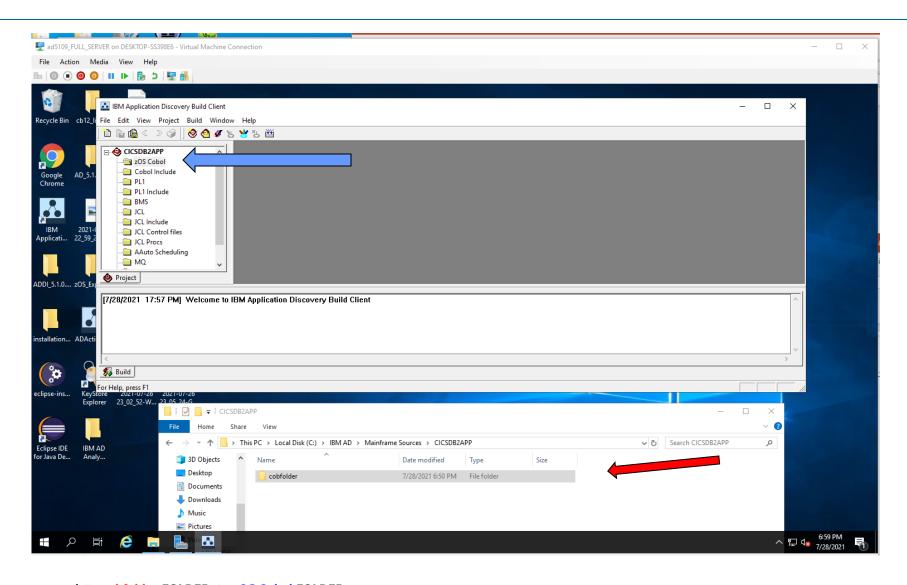
PROJECT SHARED SOURCE CODE FOLDER

COPY COBOL FOLDER CONTAINING COBOL FILES TO SOURCE FILES SHARED FOLDER





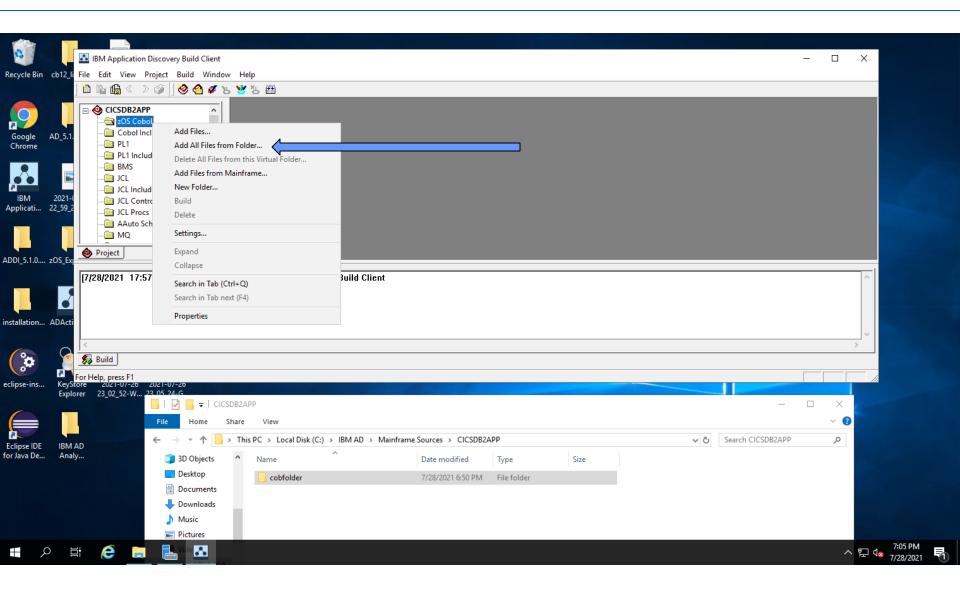
SETUP BUILD FOR WINDOWS SOURCE FILES



associate cobfolder FOLDER to zOS Cobol FOLDER

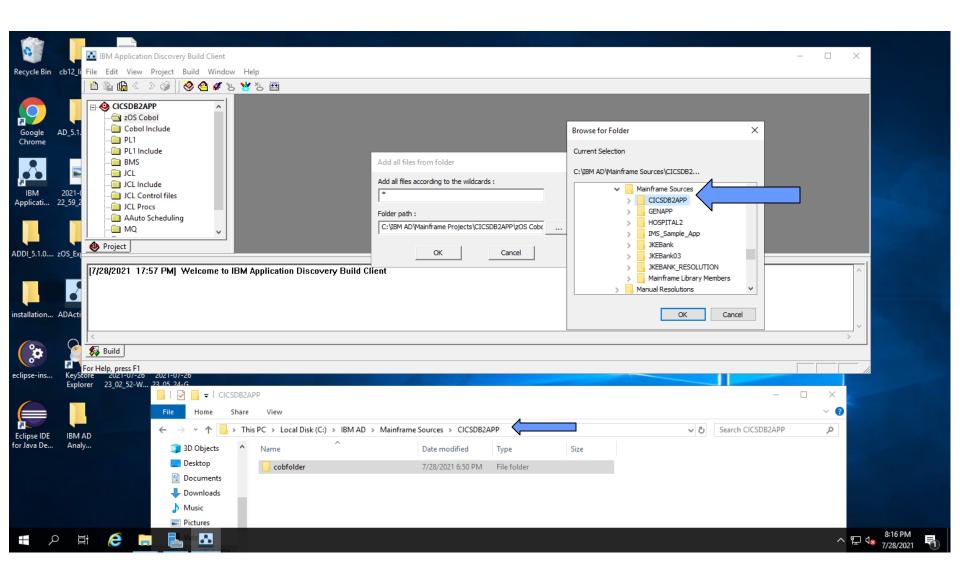


ADD ALL FILES FROM WINDOWS FOLDER



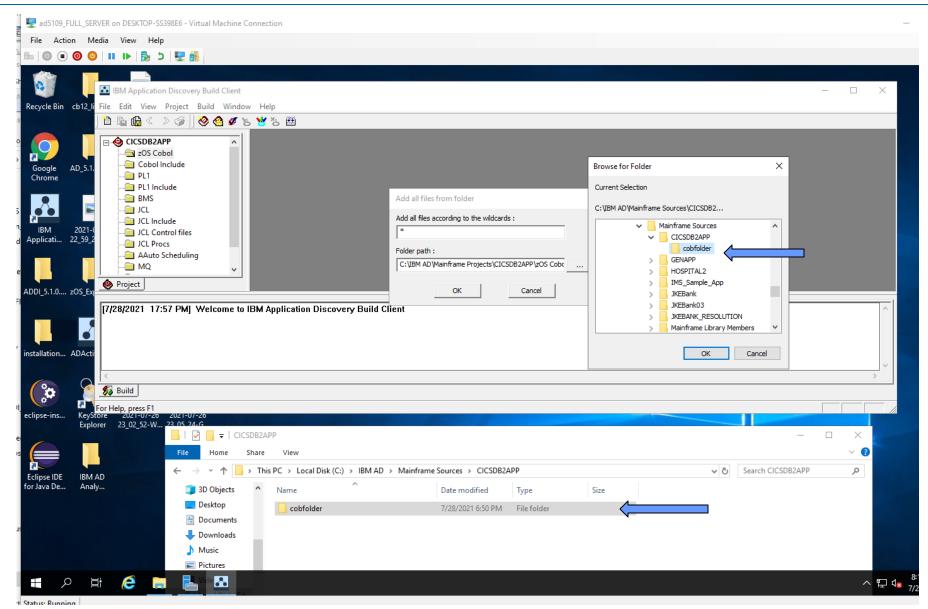


ADDING FOLDER



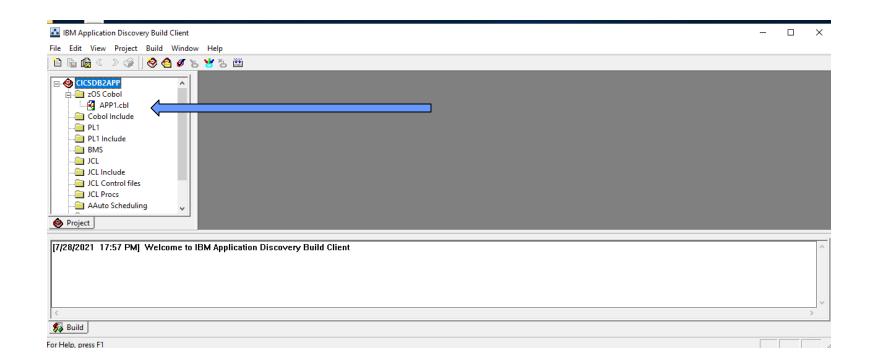


ADDING FOLDER cobfolder as a zOS COBOL



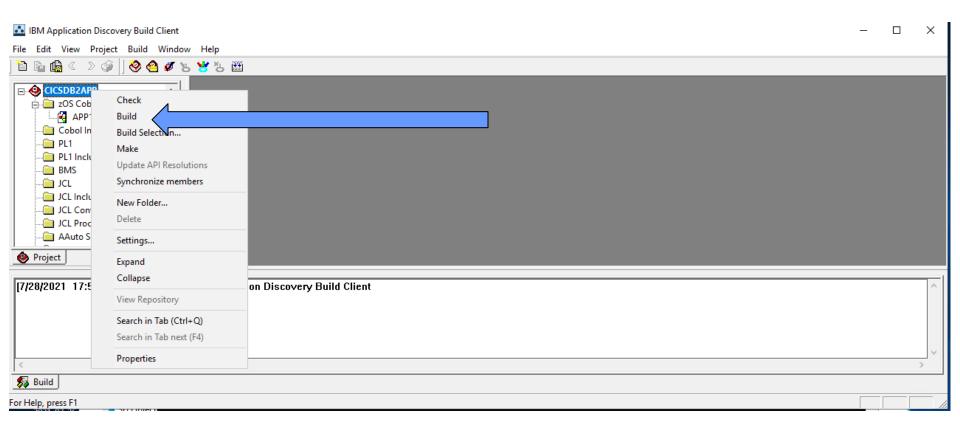


APP1.cbl COBOL file added to zOS COBOL folder



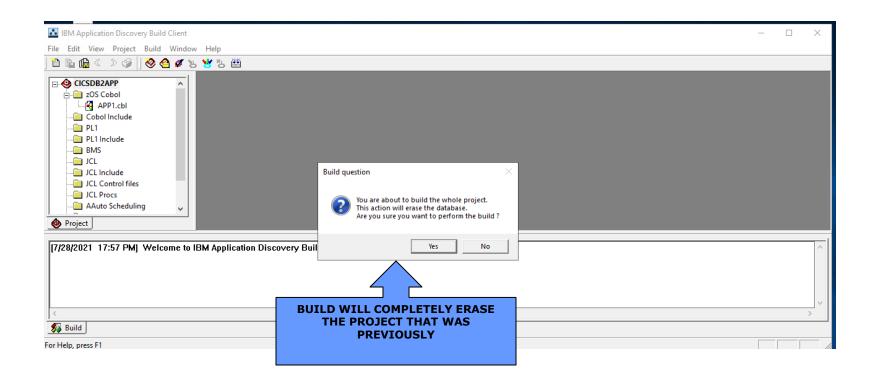


"BUILD" APPLICATION



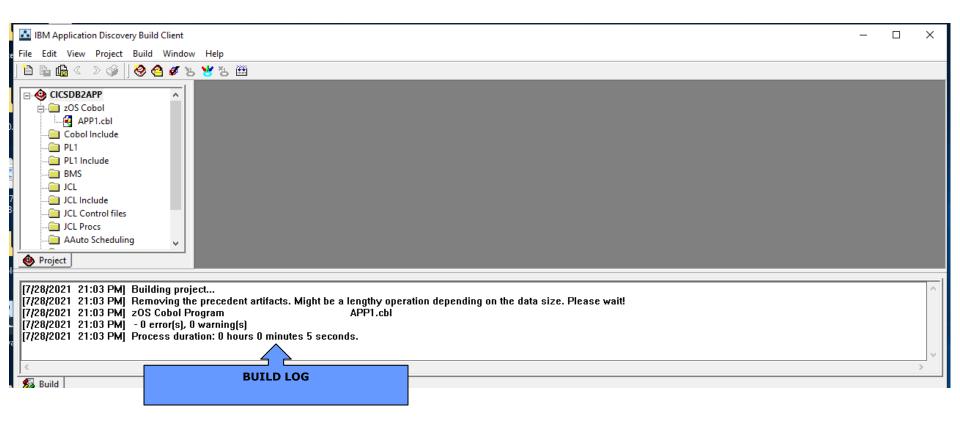


WARNING PRIOR TO BUILD....





BUILD COMPLETED

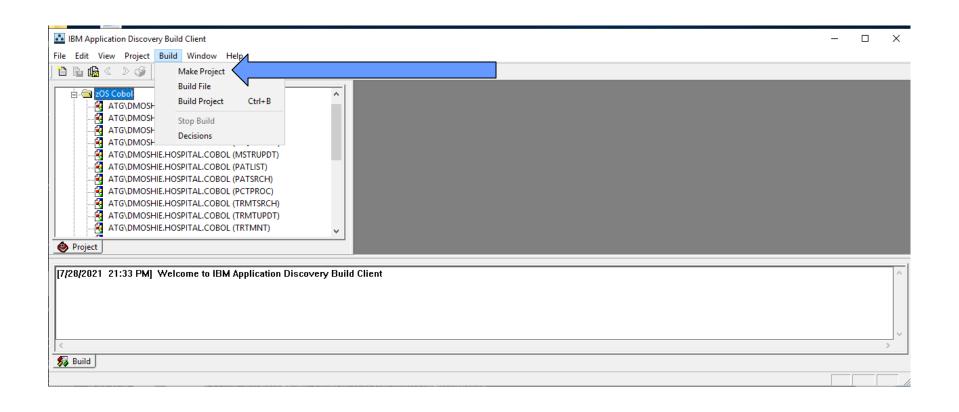


THIS IS JUST A CONTRIVED EXAMPLE OF ONLY BUILDING ONE COBOL MODULE!



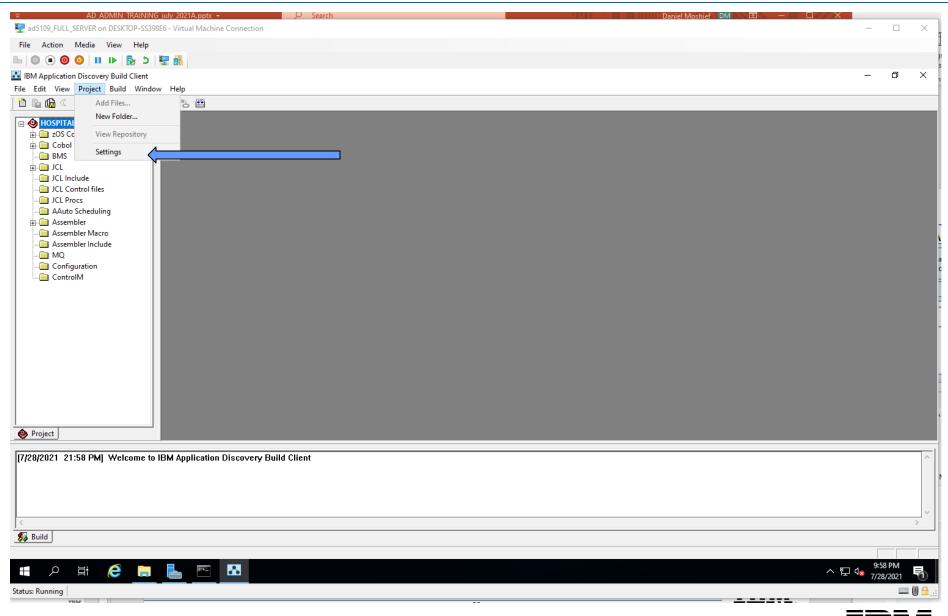
MAKE PROCESSING

SOURCE CODE IS UPDATED...ONLY BUILD UPDATED SOURCE FILES....

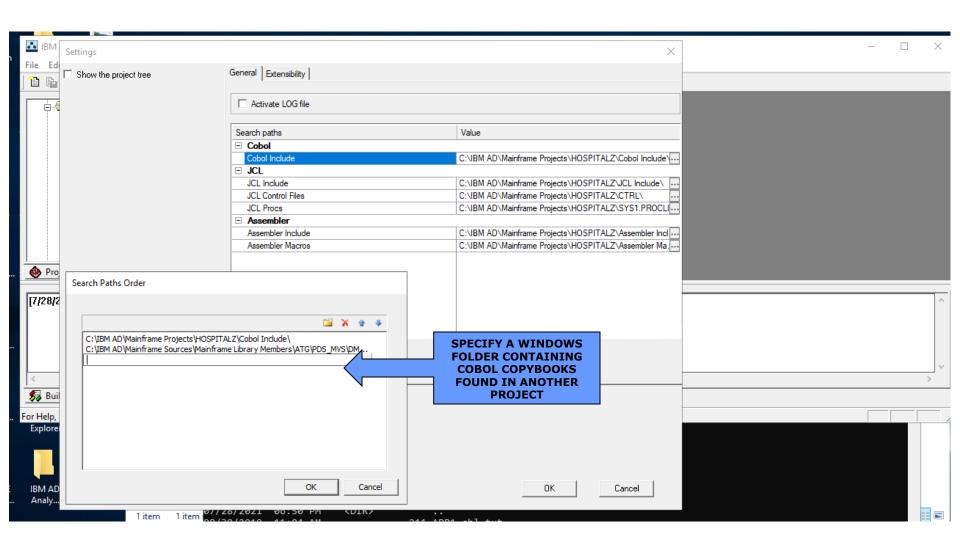




SETTINGS



SETTINGS TO ADD AN EXISTING COPYBOOK LIBRARY TO A PROJECT





INPUTS TO IMS BUILD

- BUILD CLIENT
- INPUT

COBOL SOURCE

COBOL INCLUDE

COBOL SCREEN MAPPING: MFS FILES

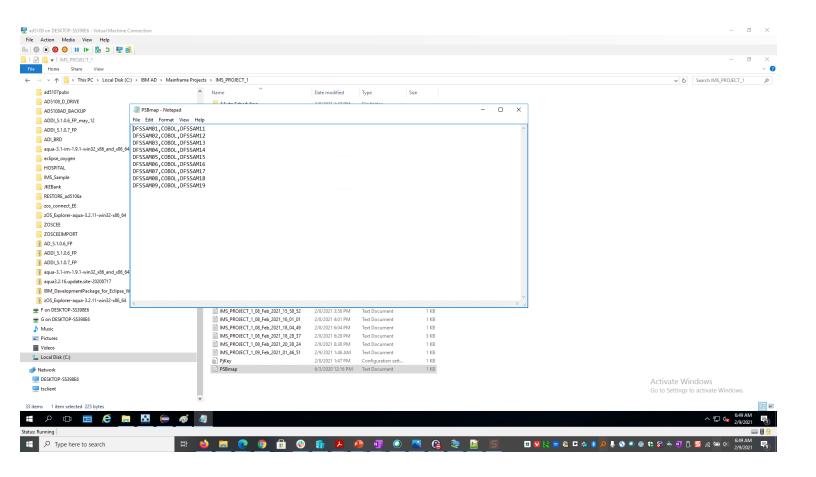
DBD FILES

PSB FILES

- TRANSACTION LIST: in CONFIGURATION VIRTUAL FOLDER
- PSBMAP.txt:

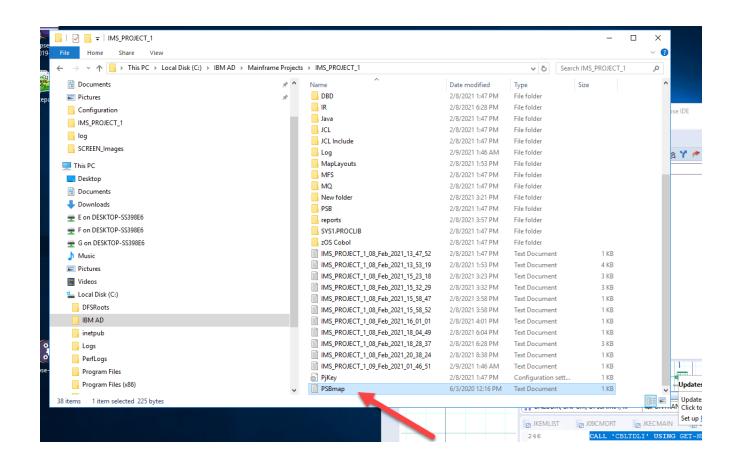


PSBMAP.txt



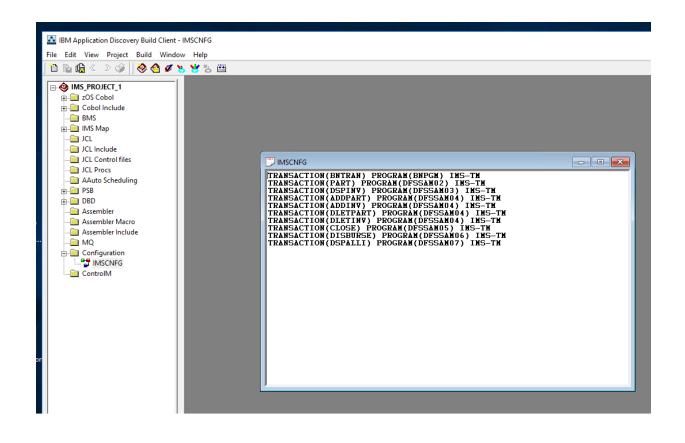


LOCATION OF PSBMAP.txt file



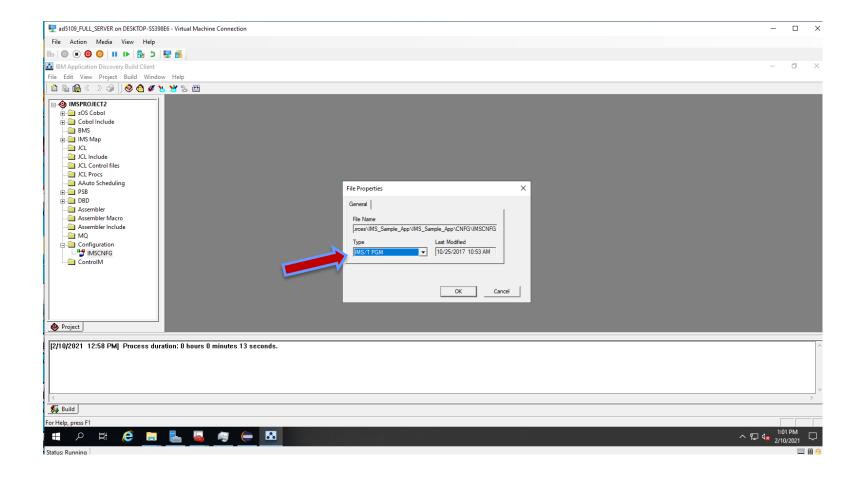


TRANSACTION LIST



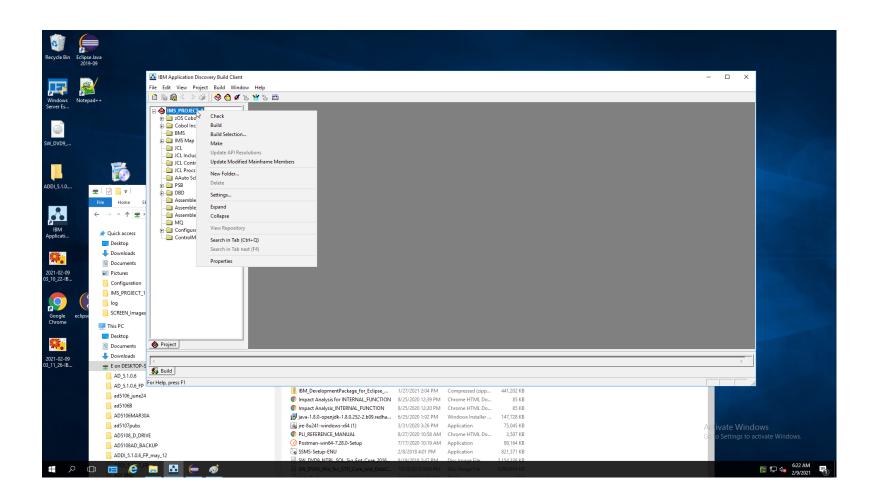


IMS TRANSACTION ...CONFIGURATION TYPE



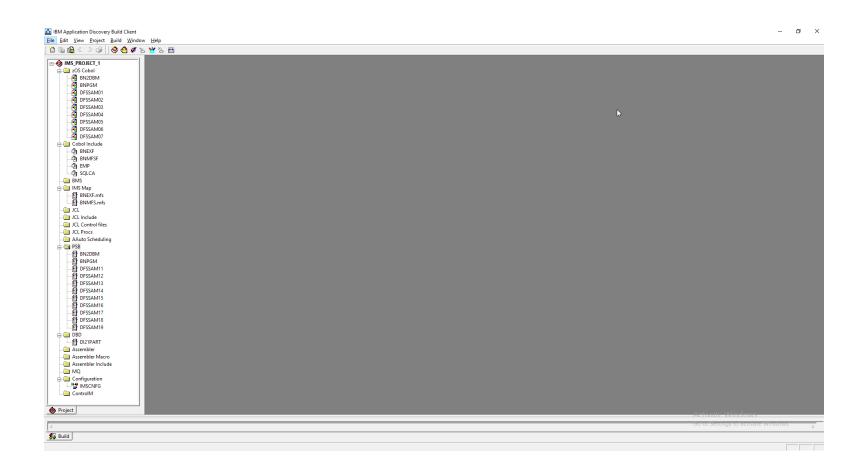


IMS BUILD



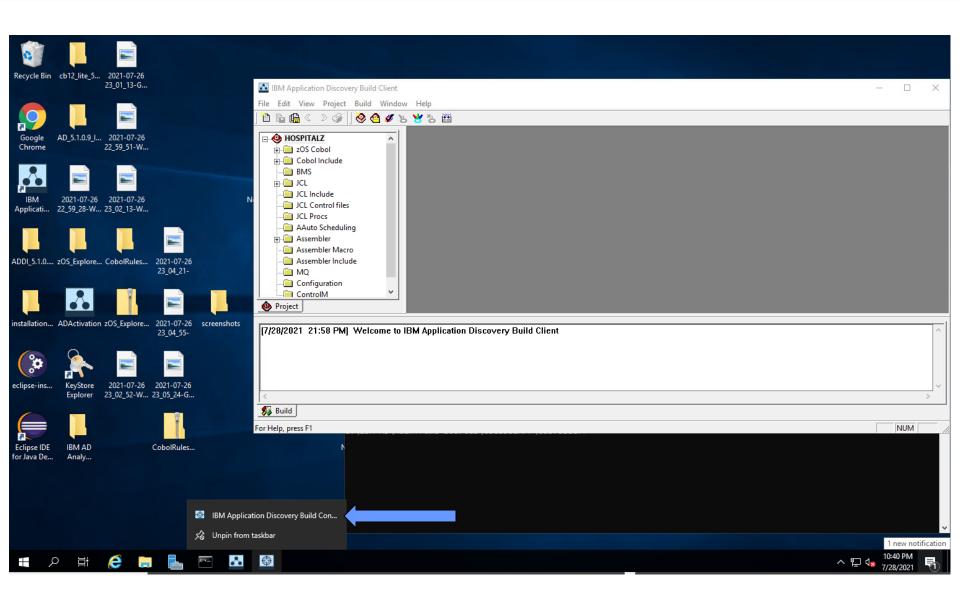


BUILD CLIENT: IMS APPLICATION READY TO BUILD



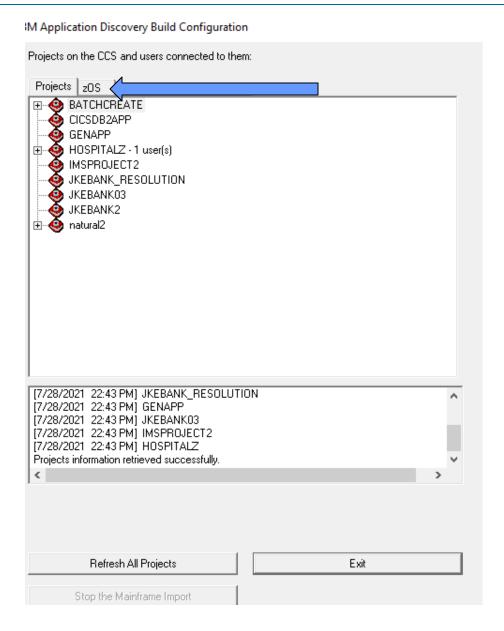


INVOKE BUILD CONFIGURATOR



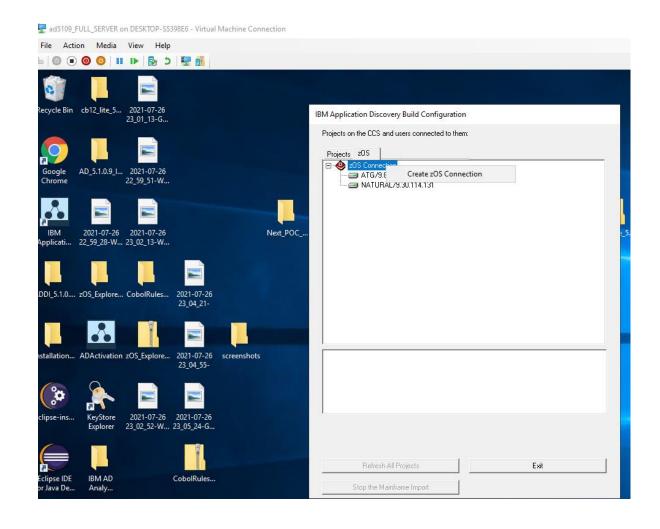


BUILD CONFIGURATOR: SELECT ZOS TAB



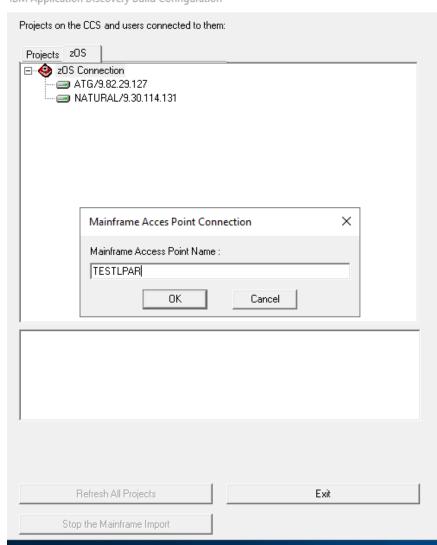


CREATE A ZOS LPAR CONNECTION TO APPLICATION DISCOVERY





ASSOCIATE IP ADDRESS AND PORT TO A CONNECTION NAME

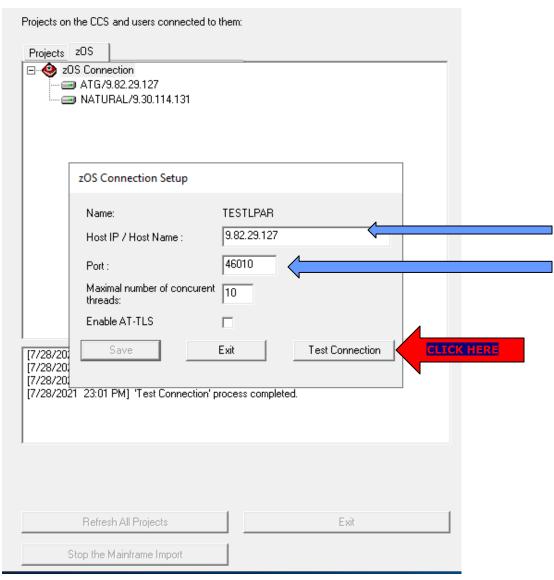






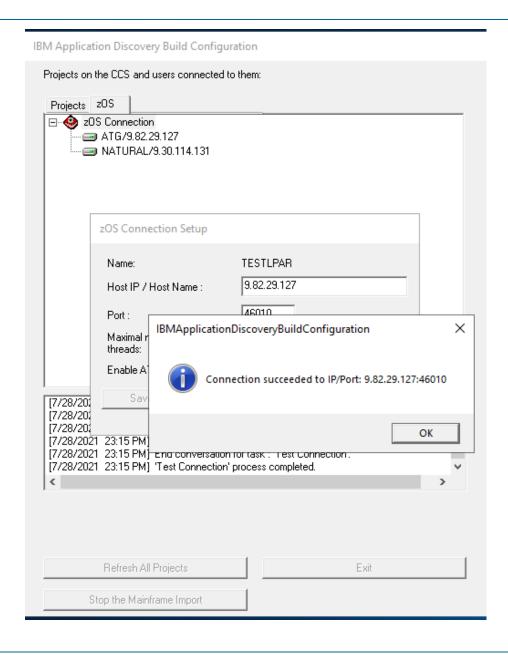
SPECIFY IP ADDRESS AND PORT.....CLICK "TEST CONNECTION"

IBM Application Discovery Build Configuration





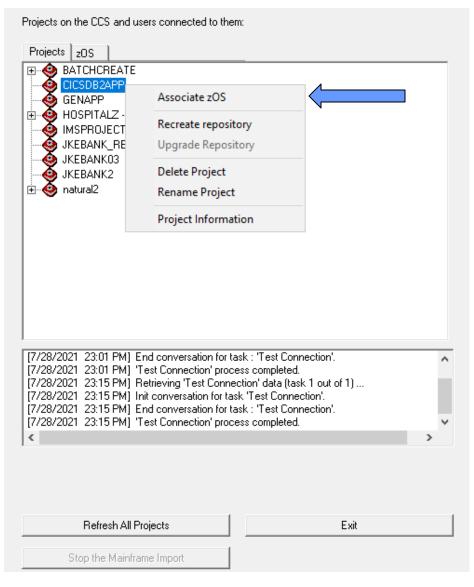
CONNECTIVITY VERIFIED





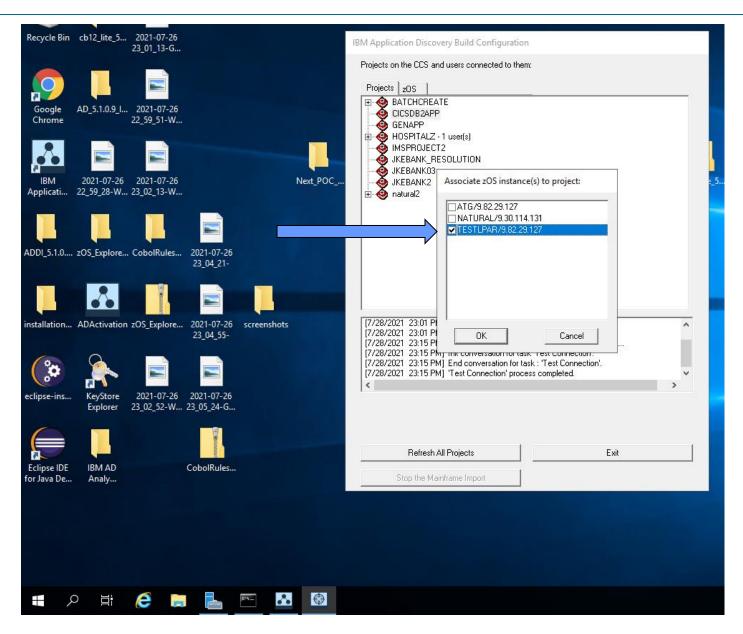
ASSOCIATE LPAR TO PROJECT





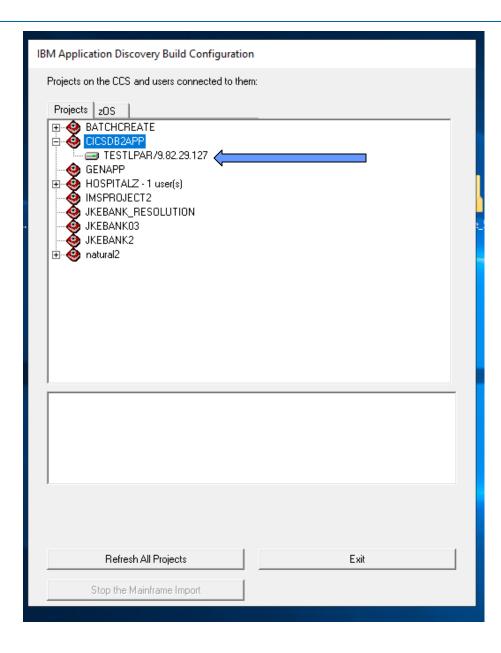


ASSOCIATE LPAR TO PROJECT



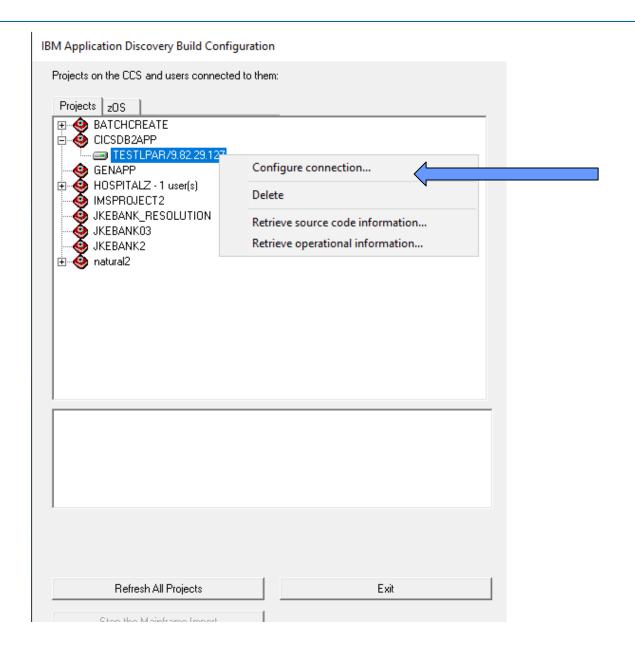


TESTLPAR ASSOCIATED TO CICSDB2APP



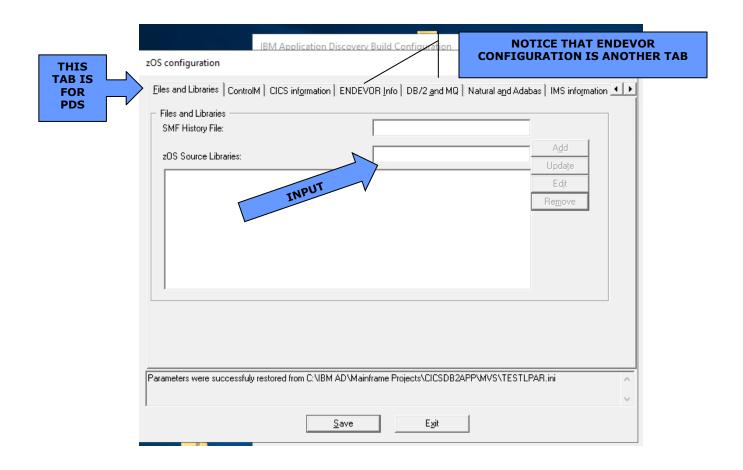


CONFIGURE CONNECTION



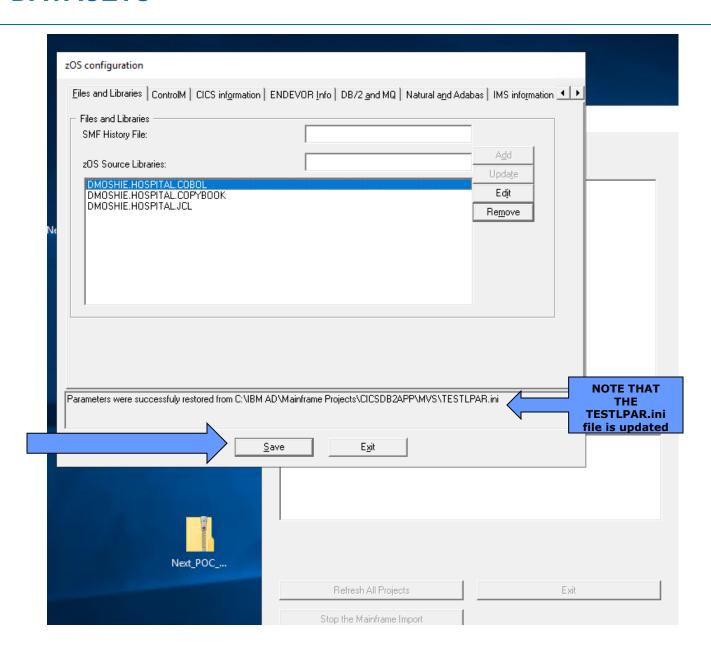


CONFIGURING INPUT DATASET AS PDS



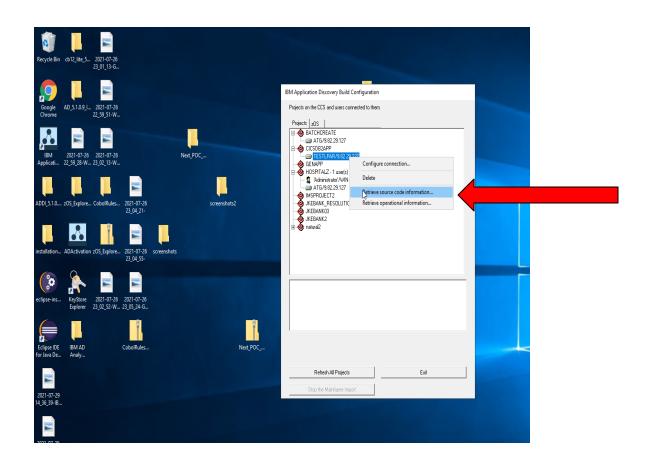


ADDING DATASETS



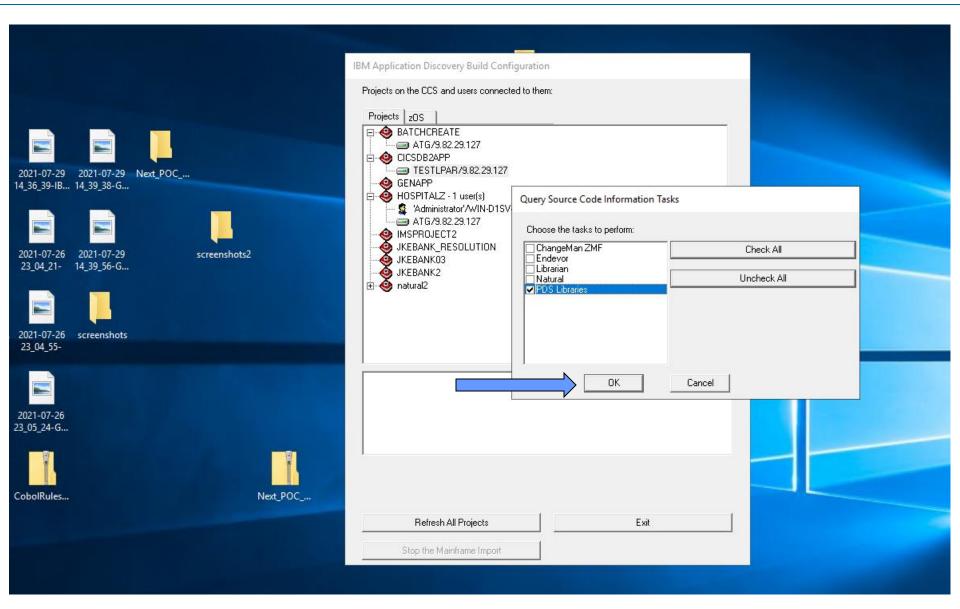


CHECK/SCAN FOR DATASET ACCESS: RETRIEVE SOURCE CODE INFO



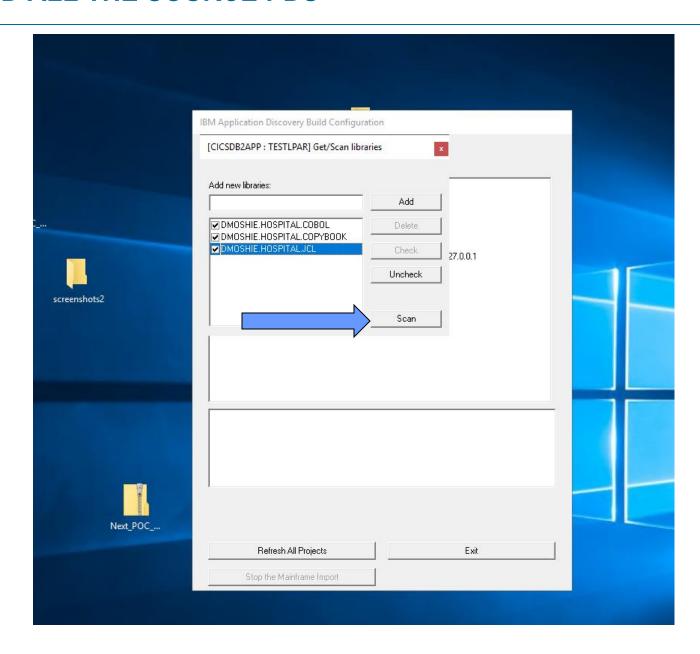


SCAN PDS LIBRARIES.....



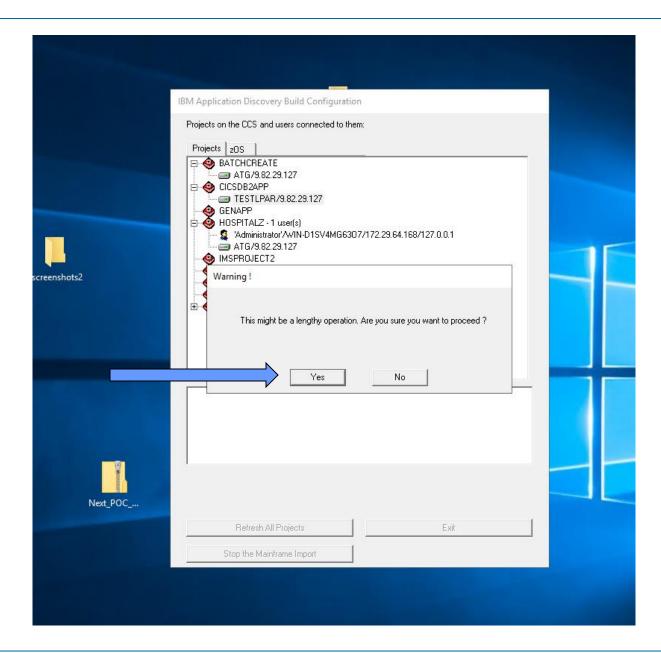


SCANNED ALL THE SOURCE PDS



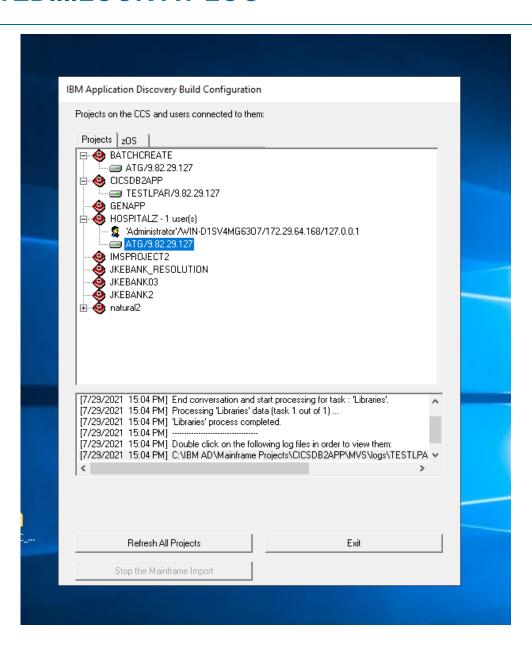


WARNING ABOUT LENGTHY OPERATION



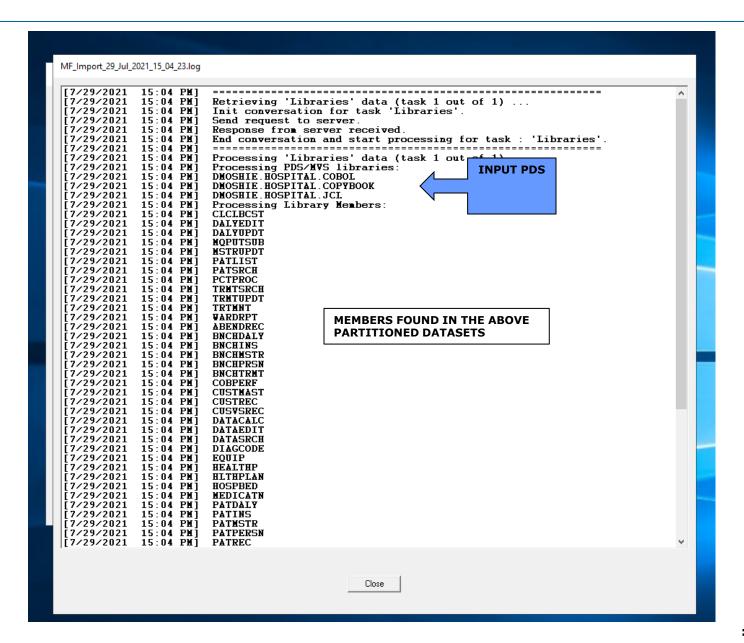


SCAN COMPLETED....LOOK AT LOG



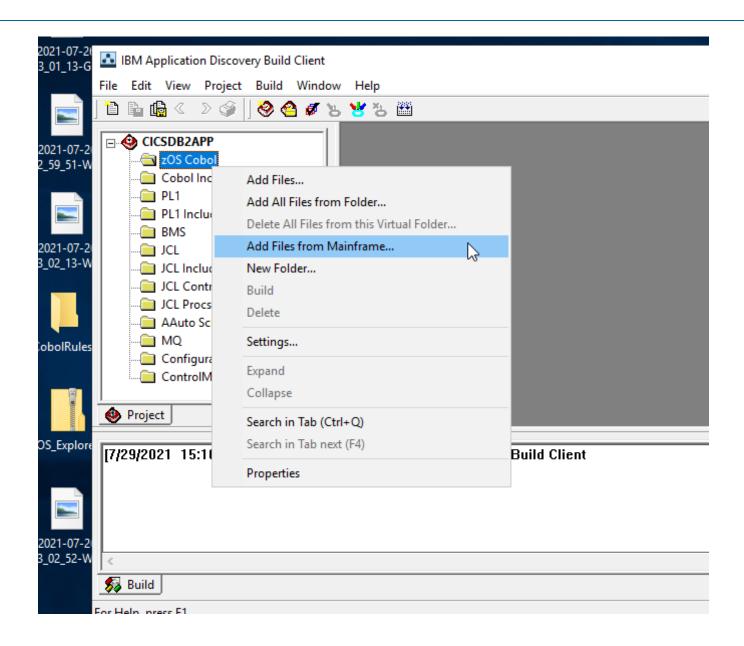


SCAN LOG....



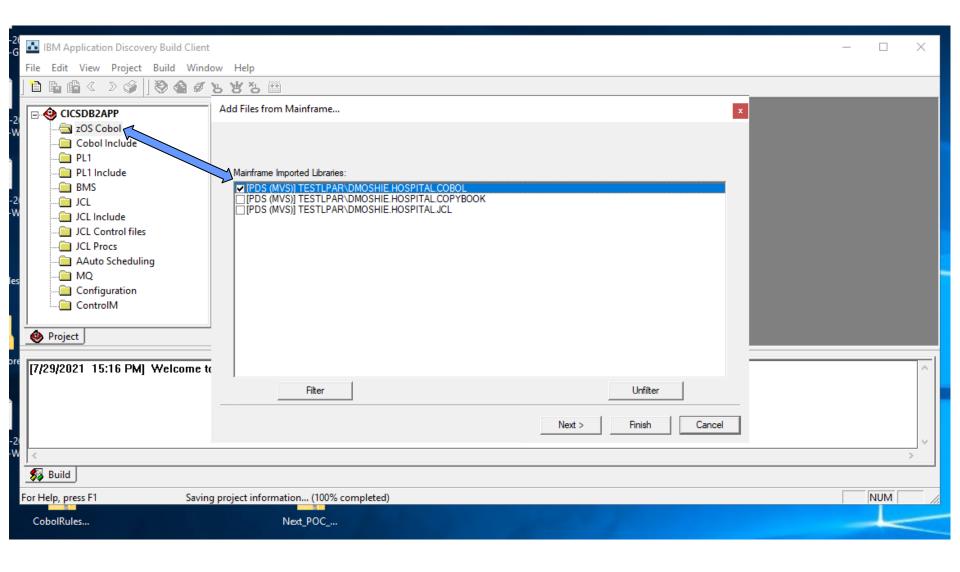


ADD FILES FROM zOS....



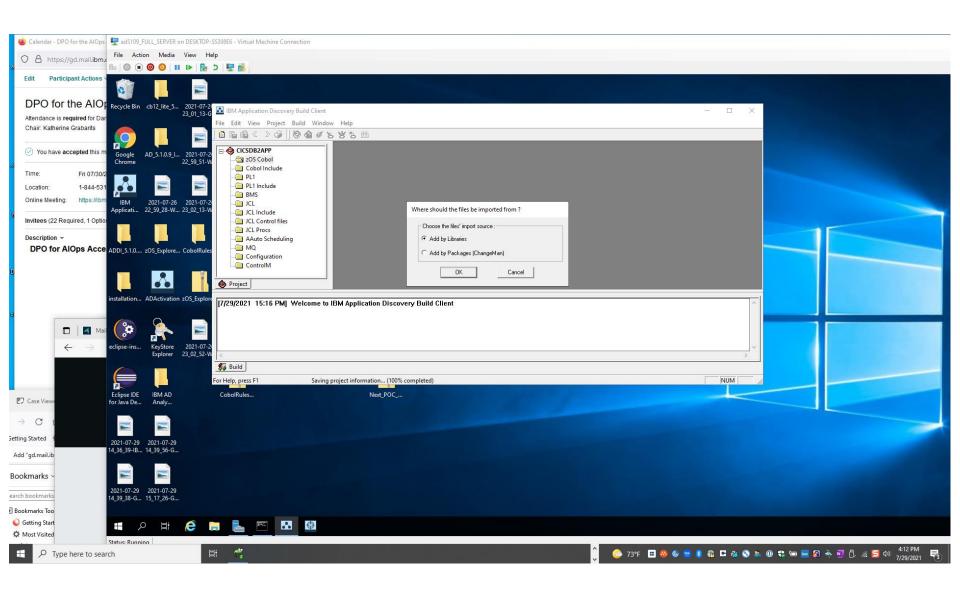


CREATE ASSOCIATION BETWEEN COBOL PDS AND COBOL AD FOLDER



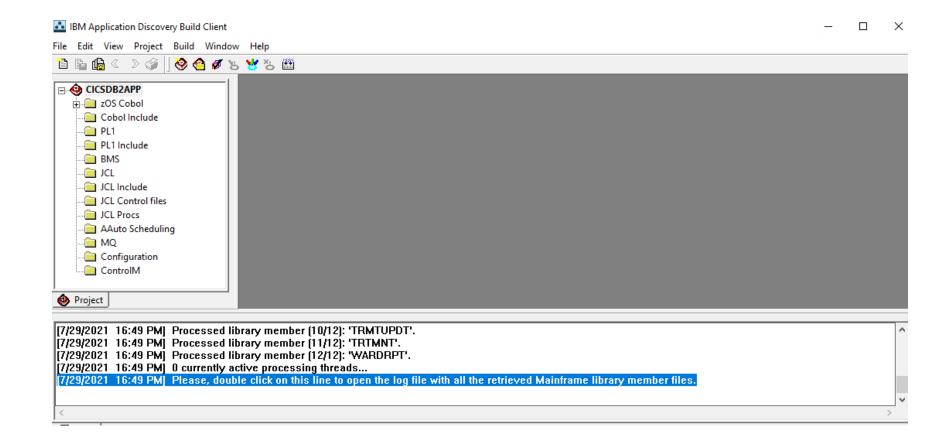


SCAN VIA LIBRARIES (NOT CHANGEMAN)



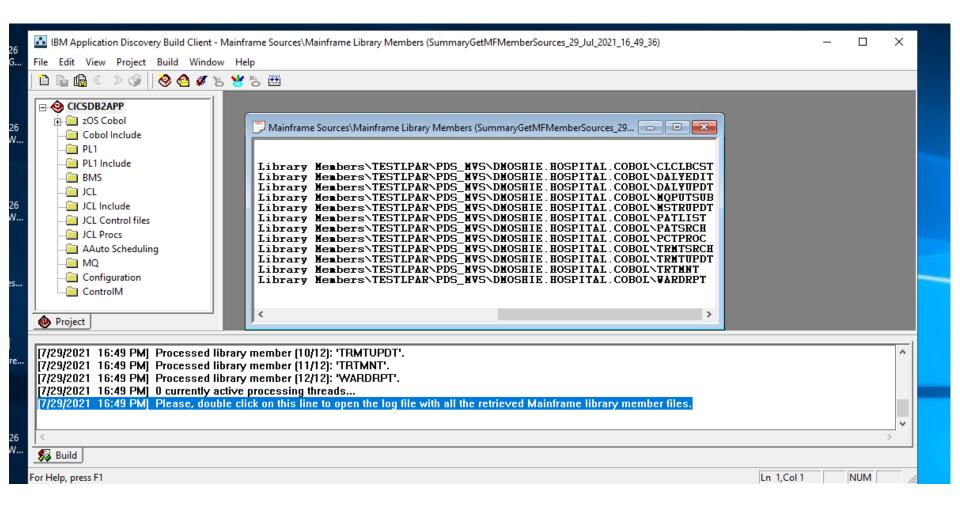


RETRIEVAL OF COBOL MEMBERS



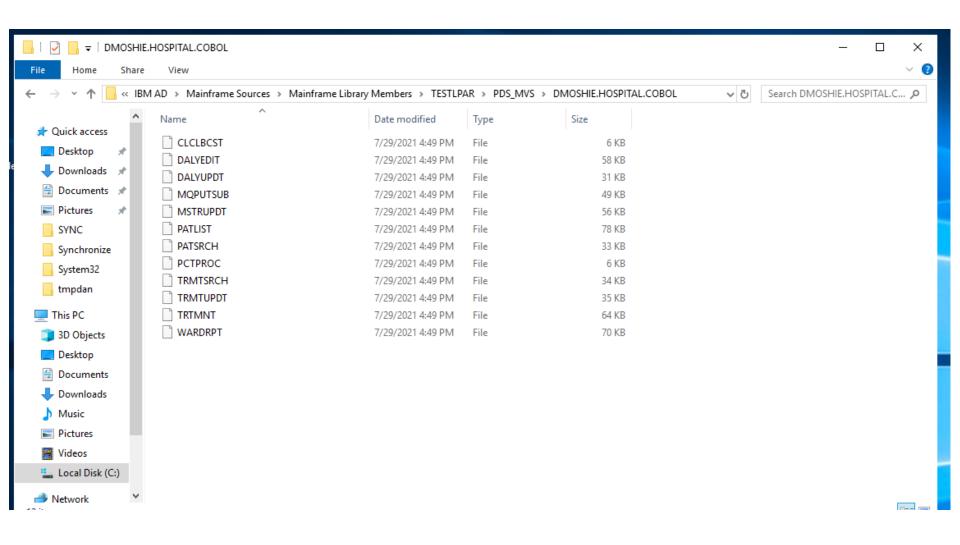


LISTING OF SOURCE FILES COPIED FROM ZOS TO SHARED FOLDER



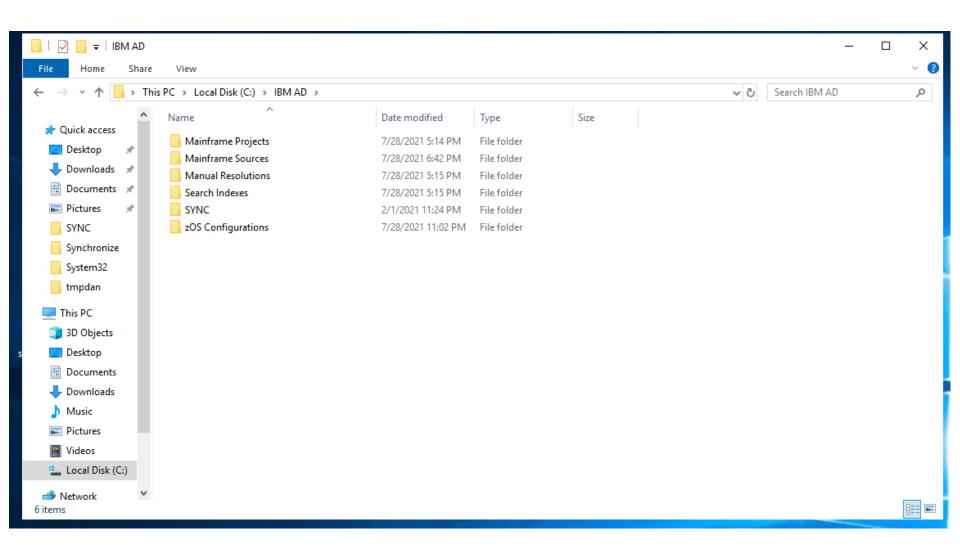


SOURCE CODE ON SHARED FOLDER



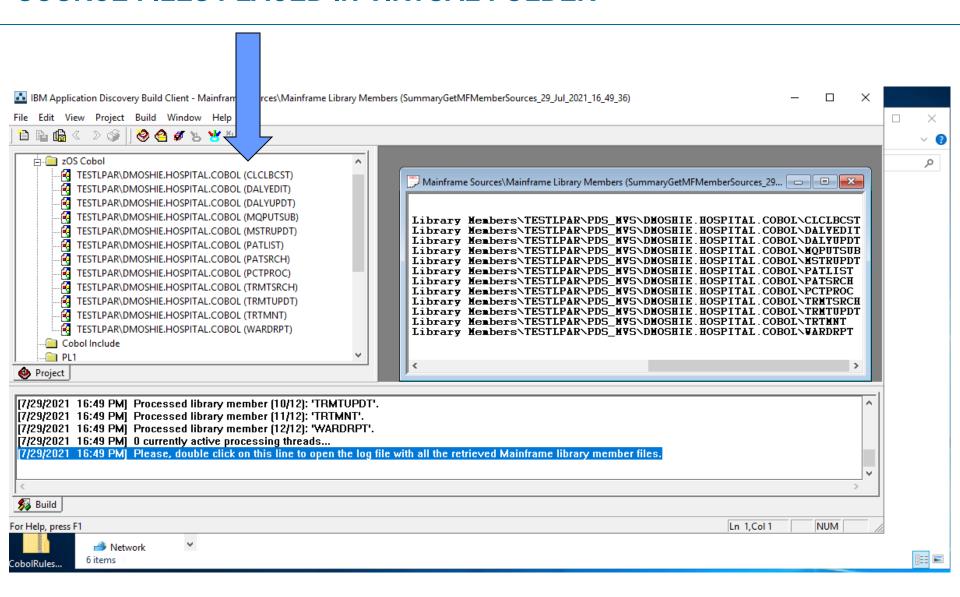


SHARED FOLDERS CREATED AT INSTALLATION TIME



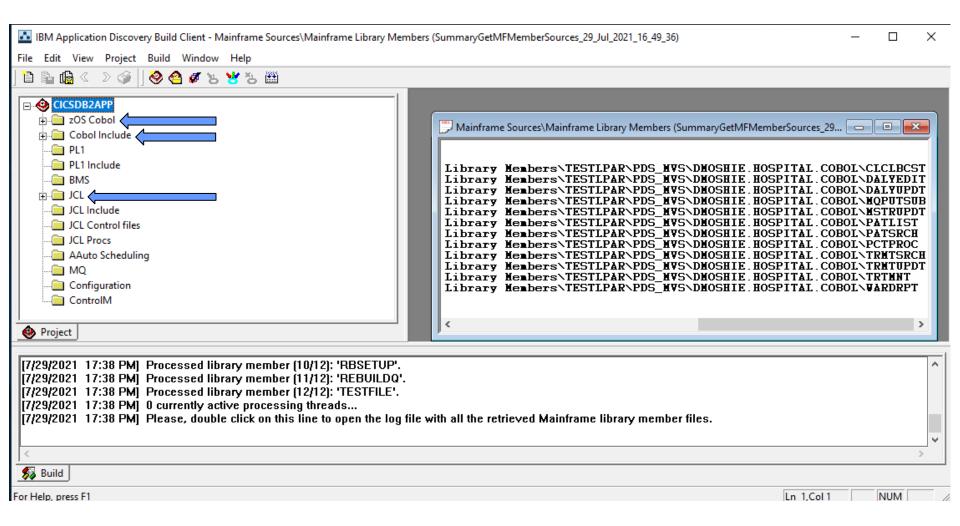


SOURCE FILES PLACED IN VIRTUAL FOLDER



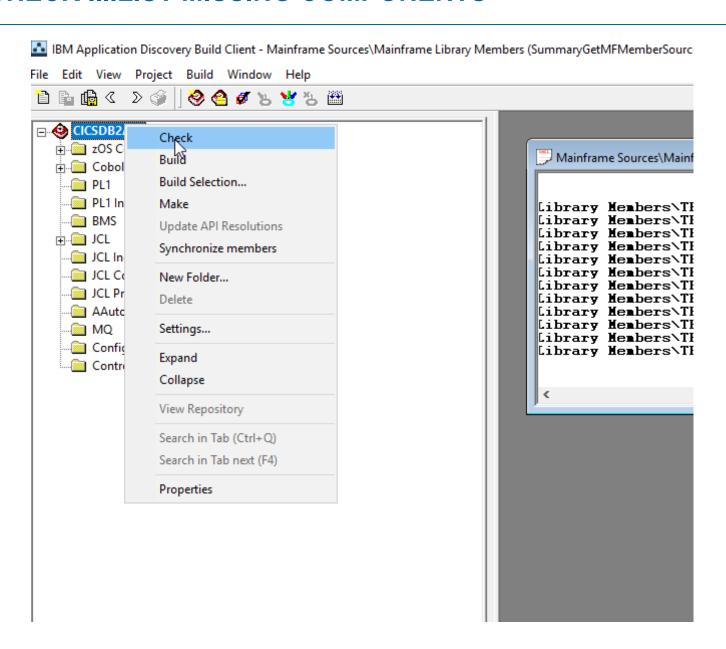


PROJECT INGESTING COBOL, COPYBOOK, JCL



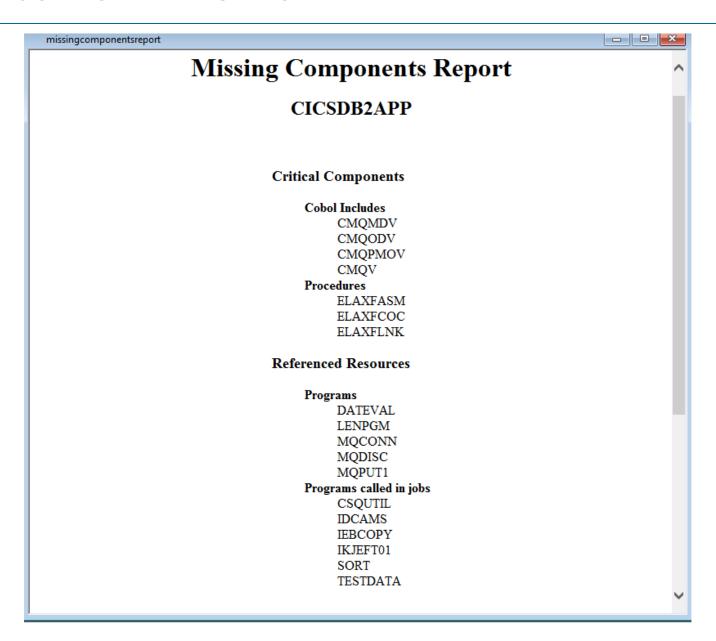


BUILD CHECKLIST MISSING COMPONENTS



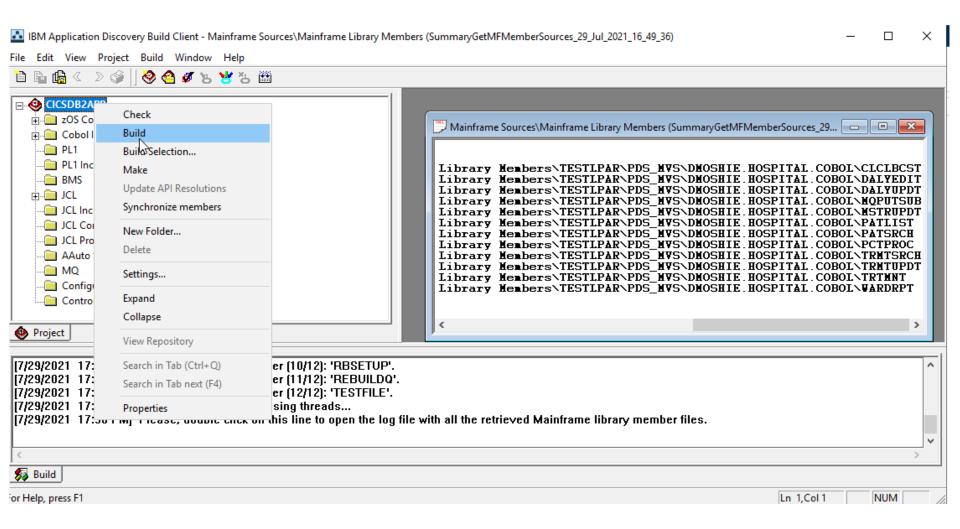


MISSING COMPONENT LISTING





BUILD PROJECT

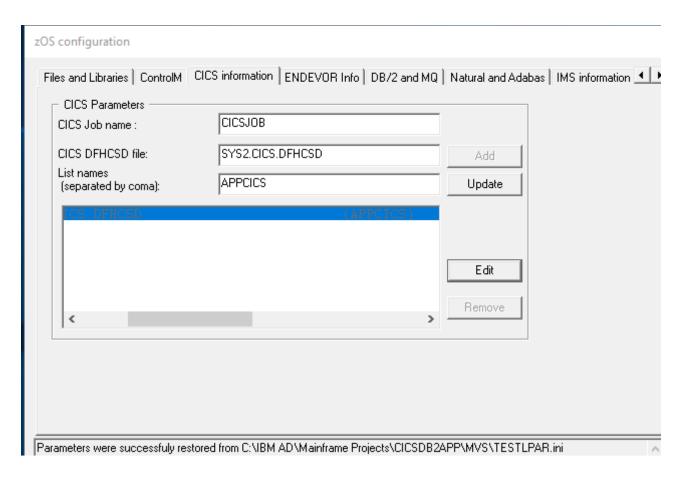




BUILD CONFIGURATOR: CICS CSD INPUT TO AD PROJECT

BATCH JOB CICSJOB IS RUN WITH SYS2.CICS.DFHCSD AS INPUT CSD DATASET, ISSUING DFHCSD COMMAND LIST LIST(APPCICS)

LIST OUTPUT IS TRANSFERRED FROM JES SPOOL TO APPLICATION DISCOVERY AND SQL DATABASE IS UPDATED WITH CICS RELATED TABLES





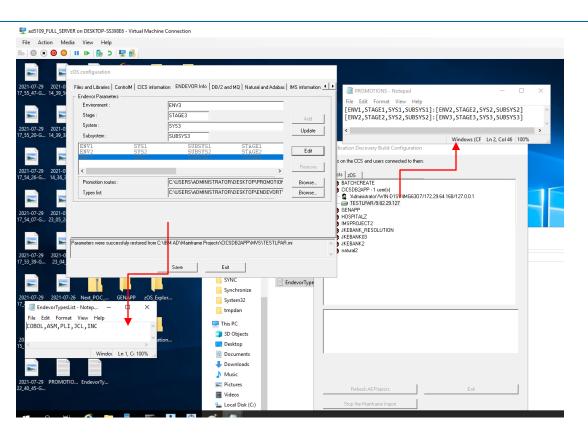
DB2 FIELD LEVEL ANALYSIS

DCLGEN MUST BE INCLUDED AS INPUT TO COBOL AND PLI

■ IF DCLGENs ARE NOT PART OF COBOL SOURCE CODE THEN ALL DCLGENs CAN BE CONSOLIDATED INTO A SINGLE PDS MEMBER, NAMING THAT MEMBER "AAAAA" SO THAT ON A BUILD, IT IS PARSED ALPHABETICALLY FIRST.



ENDEVOR CONFIGURATION



- ADMINISTRATOR PROVIDES ENVIRONMENT, STAGE, SYSTEM, SUBSYSTEM SETS AS INPUT
- THERE IS A TYPES FILE THAT SPECIFY THE "ENDEVOR TYPES"
 THAT ARE INPUT TO APPLICATION DISCOVERY PROJECT
- THERE IS A PROMOTION FILE THAT IF APPLICATION THAT CAN DESCRIBE PROGRESSION OF SOURCE CODE WITHIN ENDEVOR



SYNCHRONIZATION

- > Synchronization process is where we acquire the most recent sources from ENDEVOR or regular Partitioned Datasets on the mainframe using a synchronization file and update the mainframe sources that are placed in the Application Discovery mainframe source directory (windows).
- > Synchronization is done via running the line mode BUILD CLIENT with specific syntax

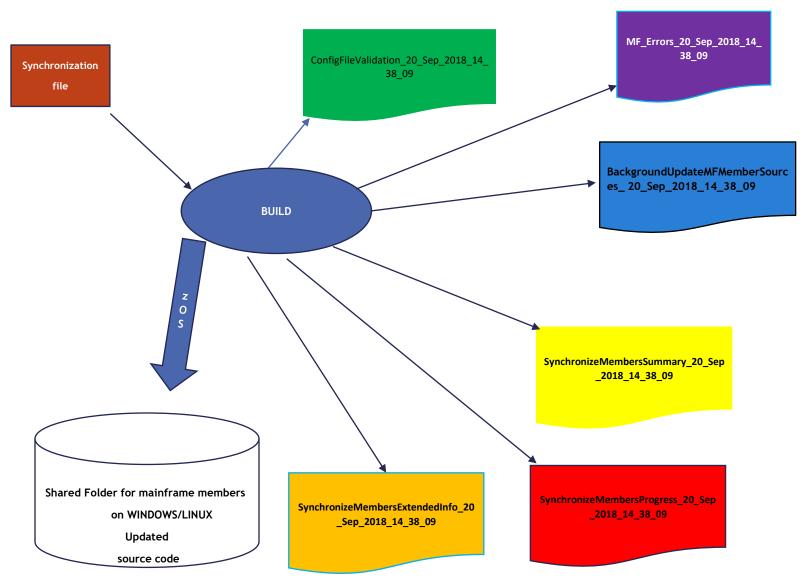
Synchronization Command Syntax:

IBMApplicationBuildClient/umm1 IAV1_APP_DVS

Specified Project Name: IAV1_APP_DVS

```
Directory of D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Clien
 \Bin\Release
06/08/2018 11:14 AM
                            17,124,864 IBMApplicationDiscoveryBuildClient.exe
                             7,361,024 IBMApplicationDiscoveryBuildConfiguration.exe
           11:18 AM
               2 File(s)
                             24,485,888 bytes
               0 Dir(s) 2,611,955,965,952 bytes free
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release>
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release>
IBMApplicationDiscoveryBuildClient /m1 IAV1_APP_DVS /m2 y /m3
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\ReleaseI
BMApplicationDiscoveryBuildClient /m1 IAV1 APP DVS /m2 y /m3 y
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\ReleaseI
BMApplicationDiscoveryBuildClient /m1 IAV1_APP_DVS /?
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\ReleaseI
3MApplicationDiscoveryBuildClient /umm1 IAV1 APP DVS
```

SYNCHRONIZATION PROCESS AND FILES



SYNCHRONIZATION file

This is a sample for TEST_Synchronize_DVS.txt file as a synchronization file:

The syntax of this file is described in the AD USERS GUIDE manual.

Each logical line is a 6 tuple

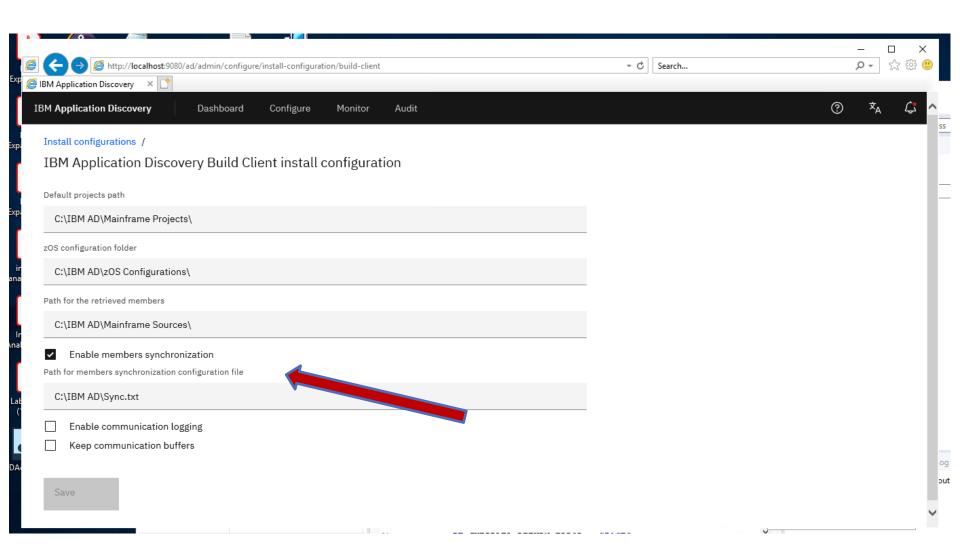
- 1. PROJECT NAME,
- 2. how the source is accessed: either Endevor or PDS,
- 3. the zOS source partitioned datasetname or ENDEVOR: ENVIRONMENT.STAGE.SYSTEM.SUBSYSTEM,
- 4. the directory Folder Name in the Project virtual folder,
- 5. the type of file (the encoded file type that is documented in APPLICATION USERS MANUAL),
- 6. the ini file used by z/OS in the BUILD CONFIGURATOR to access the source code on z/OS.

SYNCHRONIZATION FILE: MULTIPLE PROJECTS ARE SUPPORTED BY A SINGLE SYNCHRONIZATION FILE

IAV1_SHARED_INCLUDES, PDS(MVS), SEDV01.PROD.COMMON.PROCLIB, JCL PROCLIB, JAV1 SHARED INCLUDES IAV1 SHARED INCLUDES, PDS(MVS), SEDV01. PROD. SS. PROCLIB, JCL PROCLIB, IAV1 SHARED INCLUDES IAV1 SHARED INCLUDES, PDS (MVS), BNCS. CTLCARDS, JCL Control files, JCL CTRL, IAV1 SHARED INCLUDES IAV1_SHARED_INCLUDES,PDS(MVS),PEDV01.PROD.ASP.CARDLIB,JCL Control files,JCL_CTRL,IAV1_SHARED_INCLUDES IAV1_SHARED_INCLUDES,PDS(MVS),PESP01.ESP.CTLCDPDS,JCL Control files,JCL_CTRL,IAV1_SHARED_INCLUDES IAV1_SHARED_INCLUDES,PDS(MVS),PEDV01.PROD.ASP.COPYLIB,Cobol Include,COPY,IAV1_SHARED_INCLUDES IAV1 SHARED INCLUDES.PDS(MVS).PEDV01.PROD.COMMON.COPYLIB.Cobol Include.COPY.IAV1 SHARED INCLUDES IAV1 SHARED INCLUDES, PDS(MVS), PEDV01. QA.COMMON. COPYLIB, Cobol Include, COPY, IAV1 SHARED INCLUDES IAV1_SHARED_INCLUDES,PDS(MVS),XCIC11.CICS.APPLV510.SDFHCOB,Cobol Include,COPY,IAV1_SHARED_INCLUDES IAV1_SHARED_INCLUDES,PDS(MVS),XMQS11.SCSQCOBC,Cobol Include,COPY,IAV1_SHARED_INCLUDES IAV1 APP GSP, PDS (MVS), PESP01. ESP. JCLLIB, JCL, JCL, IAV1 APP GSP IAV1 APP GSP, PDS (MVS), PEDV01.PROD.GSP. CARDLIB, JCL Control files, JCL CTRL, IAV1 APP GSP IAV1_APP_GSP,PDS(MVS),PMISO1.MPTJ.CTLCDPDS,JCL Control files,JCL_CTRL,IAV1_APP_GSP IAV1 APP GSP, Endevor, PROD. GSP. GSP. COBOL. P, zOS Cobol, COBOL MVS, IAV1 APP GSP IAV1 APP GSP, Endevor, PROD. GSP. GSP. COPY. P, Cobol Include, COPY, IAV1 APP GSP IAV1 APP GSP,Endevor,PROD.GSP.GSP.MAP.P,BMS,BMS,IAV1 APP GSP IAV1 APP GSP,Endevor,PROD.GSP.GSP.ASSEM.P,Assembler,ASSEMBLER,IAV1 APP GSP IAV1 APP GSP, Endevor, PROD. GSP. GSP. MACRO. P, Assembler Macro, ASM MACRO, IAV1 APP GSP TEST IAD PROJECT, Endevor, TEST. GSP. GSP. COBOL. D, zOS Cobol, COBOL MVS, TEST IAD PROJECT

TEST_IAD_PROJECT,PDS(MVS),XGSP01.XSYS.RETRIEVE,zOS Cobol,COBOL_MVS,TEST_IAD_PROJECT

APPLICATION DISCOVERY DASHBOARD: BUILD CLIENT INSTALL SYNCHRONIZATION FILE SPECIFICATION





Checking the status of Synchronization:

Review the following files located in the Shared Project folder under the Synchronize Folder:

- SynchronizeMembersProgress_timestamp.txt: Get a quick snapshot of status of activities ie. Success or Failure.
- SynchronizeMembersSummary_timestamp.txt: See which files are updated, added, deleted
- SynchronizeMembersExtendedInfo_timestamp.txt: Combines ConfigFileValidation and BackgroundUpdateMFMemberSources files
- ConfigFileValidation_timestamp.txt
 Verify that the Synchronization File is syntactically correct

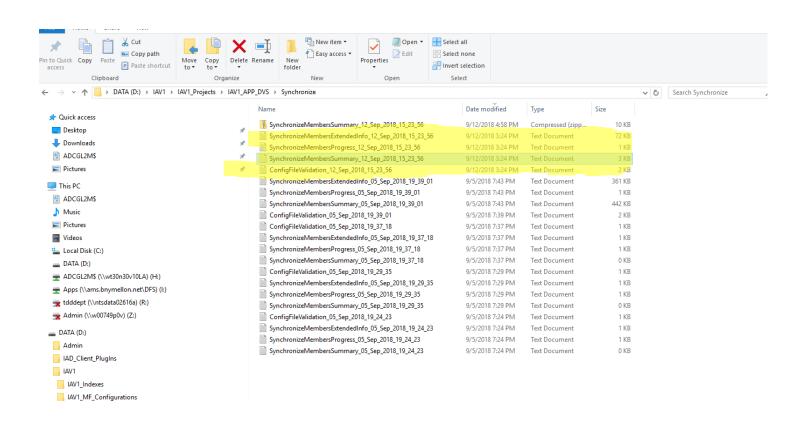
Review the following file located in Shared Project folder under \MVS\logs

 MF_Errors_timestamp.txt LIST OUT ERRORS IN Mainframe processing typically ENDEVOR

Review the following file located in the Shared Sources folder under Mainframe Library Members:

BackgroundUpdateMFMemberSources _timestamp.txt: scan of library members

Synchronize Output Files: located in Synchronization folder in Project Directory



SynchronizeMembersSummary: Listing which members were updated, deleted, added

Location in Shared Projects Folder\Projectname\Synchronized folder

```
SynchronizeMembersSummary_12_Sep_2018_15_23_56 - Notepad
File Edit Format View Help
MVS Connection : IAV1 APP DVS
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASN90AD1
[9/12/2018 15:24 PM]
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASP90BAP
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASP90BUX
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASP90BY2
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASP90DE1
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASPBT09X
[9/12/2018 15:24 PM]
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASPHD09X
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\ASPX317X
[9/12/2018 15:24 PM]
                      Updated : \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\SCBD0CX
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\SCBDDOL
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\SCBDDRI
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\SCBDPLRC
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\XCBDDTX
[9/12/2018 15:24 PM]
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\XCBDMFS
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\XSP90702
[9/12/2018 15:24 PM]
[9/12/2018 15:24 PM]
                      Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\XSPABBI1
[9/12/2018 15:24 PM] Updated: \\W00749P0V\IAV1 Source\Mainframe Library Members\IAV1 APP DVS\PDS MVS\PMIS01.MROH.CTLCDPDS\XSPAC21X
```

Synchronization Members Progress: Determine Success/Failure

location in Shared Projects folder\Projectname\Synchronize folder

```
SynchronizeMembersProgress_12_Sep_2018_15_23_56 - Notepad
File Edit Format View Help
[9/12/2018 15:24 PM]
Members Synchronization Progress...
_____
[9/12/2018 15:24 PM]
                       Parsing the configuration file...
                       Validating the configuration file...
[9/12/2018 15:24 PM]
[9/12/2018 15:24 PM]
                       Scanning libraries...
[9/12/2018 15:24 PM]
                       Computing deltas...
[9/12/2018 15:24 PM]
                       Updating members...
[9/12/2018 15:24 PM]
                       No file to add to/remove from the project...
[9/12/2018 15:24 PM]
                       Nothing to remove from the database...
[9/12/2018 15:24 PM]
                       Process completed!
```



Synchronization Members Extended: combines config file validation and BackgroundUpdateMFMember Sources

location in Shared Projects Folder\Projectname\Synchronization folder

```
SynchronizeMembersExtendedInfo_12_Sep_2018_15_23_56 - Notepad
File Edit Format View Help
[9/12/2018 15:24 PM]
CONFIGURATION FILE VALIDATION LOG
[9/12/2018 15:24 PM] Validating the configuration file '\\W00749P0V\Admin\TEST_Synchronize_DVS.txt'
[9/12/2018 15:24 PM] The configuration file is valid! =======
[9/12/2018 15:24 PM] Send request to server.
[9/12/2018 15:24 PM] Response from server received.
[9/12/2018 15:24 PM] End conversation and start processing for task : 'Endevor'.
[9/12/2018 15:24 PM] -----
[9/12/2018 15:24 PM] Processing 'Endevor' data (task 1 out of 1) ... 
[9/12/2018 15:24 PM] Processing ENDEVOR libraries: 
[9/12/2018 15:24 PM] PROD.OMS.OMOD.P
[9/12/2018 15:24 PM] PROD.DVS.DVS.COPY.P
[9/12/2018 15:24 PM] Processing Library Members:
[9/12/2018 15:24 PM] SCBEBLK
[9/12/2018 15:24 PM] SCBEDTFS
[9/12/2018 15:24 PM] SCREETE
[9/12/2018 15:24 PM] SCBEGK1B
[9/12/2018 15:24 PM] SCBENDMA
[9/12/2018 15:24 PM] SCBENDMB
```

Configuration File Validation Log: verifies that Config parses

location in Shared Projects Folder\Projectname\Synchronization folder

```
ContighileValidation_12_Sep_2018_15_23_56 - Notepad
                                                                                                                                    - ⊔ x
File Edit Format View Help
[9/12/2018 15:24 PM]
CONFIGURATION FILE VALIDATION LOG
_____
[9/12/2018 15:24 PM] Validating the configuration file '\\W00749P0V\Admin\TEST_Synchronize_DVS.txt'
[9/12/2018 15:24 PM]
                Validating the file's syntax ============
[9/12/2018 15:24 PM] Validating the projects' names -----
[9/12/2018 15:24 PM] Validating the libraries' types ------
[9/12/2018 15:24 PM]
                Validating the virtual folders per projects =========
[9/12/2018 15:24 PM] Validating the members' types' permission in virtual folders ------
[9/12/2018 15:24 PM]
                Validating the 'zOS'es attached to projects -----
[9/12/2018 15:24 PM]
               [9/12/2018 15:24 PM] The configuration file is valid! -----
```

MF_Errors: List out Mainframe Errors in accessing source code

Location in Shared Projects folder\Projectname\MVS\error

```
[8/28/2018 17:41 PM]
[8/28/2018 17:41 PM]
                      Init conversation for task 'Endevor'.
[8/28/2018 17:41 PM]
                      End conversation and start processing for task : 'Endevor'.
[8/28/2018 17:41 PM]
[8/28/2018 17:41 PM]
                      Processing task: ENDEVOR
[8/28/2018 17:41 PM]
                      MF Agent ( ZLG1030U ):
Agent/module IAYCONN :
                      ERROR accessing: PROD
                                                DVS
                                                         DVS
                                                                  ASSEM
                                                                                      , ELEMENT not found
[8/28/2018 17:41 PM]
                      MF Agent ( ZLG1030U ):
Agent/module IAYCONN : ERROR accessing:PROD
                                                                                      , ELEMENT not found
                                                DVS
                                                         DVS
                                                                  INCLASM P
[8/28/2018 17:41 PM]
                      MF Agent ( ZLG1030U ):
Agent/module IAYCONN :
                       ERROR accessing: PROD
                                                DVS
                                                         DVS
                                                                  INCLDAT P
                                                                                      , TYPE not found
[8/28/2018 17:41 PM] MF Agent ( ZLG1030U ):
Agent/module IAYCONN : ERROR accessing:PROD
                                                DVS
                                                         DVS
                                                                  INCLUDE P
                                                                                      , ELEMENT not found
[8/28/2018 17:42 PM] MF Agent ( ZLG1030U ):
Agent/module IAYCONN : ERROR accessing:PROD
                                                DVS
                                                         DVS
                                                                  MACRO
                                                                                      , ELEMENT not found
                                                                           Ρ
[8/28/2018 17:42 PM] End task: ENDEVOR
```

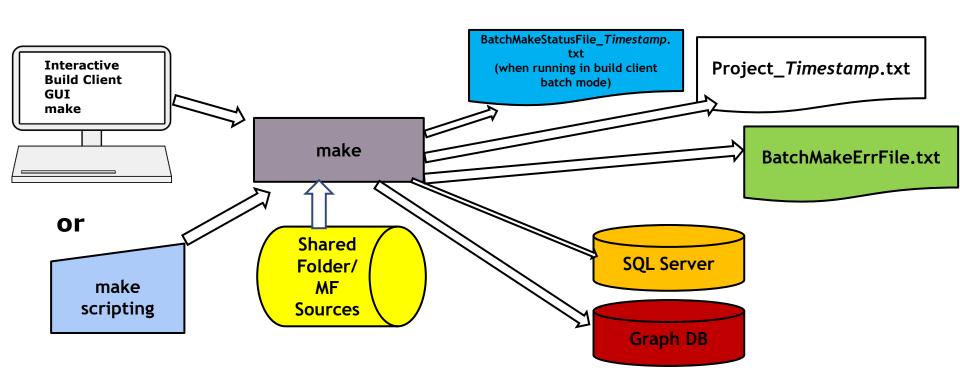
BackgroundUpdateMFMemberSources: a log of retrieval of sources from zOS

Location in Shared Sources Folder\Mainframe Library Members

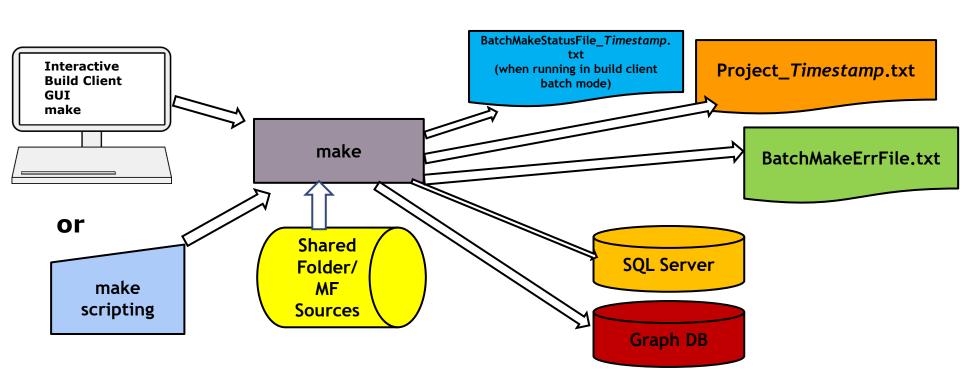
```
| Bategroundbydrate/MitemberCourse: Notepad
| File | Enter | Year | High
| $71/27081 | $1524 PM| | Updating Mainframe library member files...
| $71/27081 | $1524 PM| | Updating Mainframe library member files...
| $71/27081 | $1524 PM| | Updating From Index Foremethy of the No. | 1801_809_805...
| $71/27081 | $1524 PM| | Updating from update ZP (member(s) by these of 100 from the NO. | 1801_809_805...
| $71/27081 | $1524 PM| | Commently active processing threads...
| $71/27081 | $1524 PM| | Commently active processing threads...
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (3): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (3): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (3): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (6): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (6): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (6): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (6): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (6): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (6): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (6): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (7): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed library member (1): 'ASMEDIA'.
| $71/27081 | $1524 PM| | Processed li
```



make processing



make processing



make syntax in Application Discovery

PROGRAM Found in this directory:

...\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release>

IBMApplicationDiscoveryBuildClient /m1 Project /m2 y /m3 y

```
Syntax: /m1 PROJECTNAME /m2 (y/n) /m3 (y/n) /m1 Projectname Specify the Projectname to be "make" /m2 yes or no specify yes to run the build client in the background so that the build client can be run elsewhere /m3 yes or no for generating the make status file BatchMakeStatus_timestamp.txt
```

It is recommended that /m3 y is specified to generate the BatchMakeStatus file

Unlike the unix make command, there is NO file input for the Application Discovery make process.

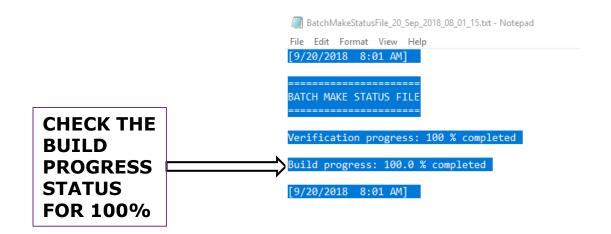


Invocation of build client in batch make mode

```
Administrator: Command Prompt
                                                                                                                 06/08/2018 11:04 AM
                               103,936 WSBridge.dll
06/08/2018 11:04 AM
                                13,312 WSBridgeps.dll
06/08/2018 11:21 AM
                                 8,704 WSBridgeps x64.dll
                             4,734,976 WSMngr.dll
06/08/2018 11:07 AM
                             1,597,440 xerces-c 1 6 0.dll
06/08/2018 10:05 AM
                             2,281,472 XmlInfoFilter.dll
06/08/2018 10:21 AM
06/08/2018 10:05 AM
                                60,416 zookeeper.dll
             143 File(s)
                            211,751,617 bytes
               6 Dir(s) 1,091,982,393,344 bytes free
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release>
dir *BUILD*
 Volume in drive D is DATA
 Volume Serial Number is D63A-8154
 Directory of D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Clien
 \Bin\Release
06/08/2018 11:14 AM
                            17,124,864 IBMApplicationDiscoveryBuildClient.exe
                             7,361,024 IBMApplicationDiscoveryBuildConfiguration.exe
06/08/2018 11:18 AM
               2 File(s)
                             24,485,888 bytes
               0 Dir(s) 1,091,982,393,344 bytes free
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release>
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release>
IBMApplicationDiscoveryBuildClient /?
D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\ReleaseI
BMApplicationDiscoveryBuildClient /m1 IAV1 APP DV5 /m2 y /m3 y
```

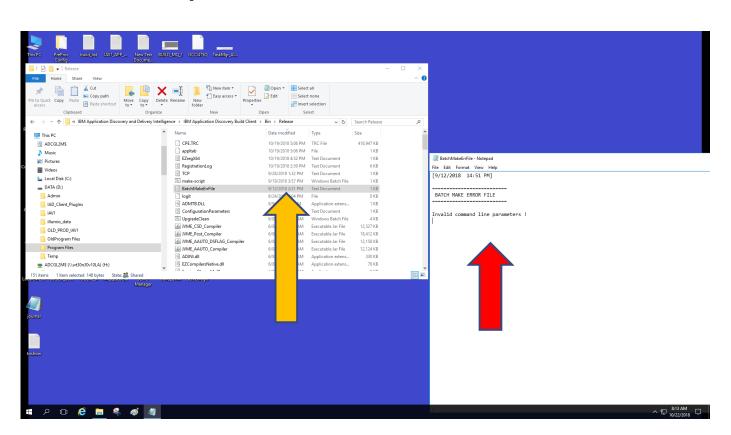
Determining Success of make processing: BatchMakeStatusFile_timestamp.txt

BatchMakeStateFile_timestamp.txt is located in PROJECT SHARED FOLDER/Project folder.



BatchMakeErrFile.txt: syntax error in make command

Located in D:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release



Project_Timestamp.txt Running log of entire make processing

Project_Timestamp.txt is located in PROJECT SHARED FOLDER/Project folder.

User Name : admin Computer Name : IBMServer IP Address : 192.168.159.162

[8/27/2018 20:06 PM] Building project... [8/27/2018 20:11 PM] zOS Cobol Program

[8/2//2018 20:11 PM] ZOS Cobol Program

•••

• • •

[8/27/2018 20:12 PM] BMS Map

[8/27/2018 20:12 PM]

C:\Users\admin\Desktop\JKEBANK\JKEBank\BMS\JKEMORT(24): Warning

[1043]: Syntax Error: 'Length attribute is Missing'

[8/27/2018 20:13 PM] - 15 error(s), 20 warning(s)

Terminating message for Project make log

CSMRT001

82

JKEMORT

Start of Project make log

BATCH CREATE, POPULATE AND FULL BUILD OF A NEW PROJECT

- CUSTOMER CAN AUTOMATE THE MANUAL PROCESSING (USING BATCH CLIENT) INTERFACE, SAVING TIME, AND EFFORT
- REQUIRES CREATING/UPDATE FILES FOR:

DESCRIBING APPLICATION TYPE: COBOL, CICS, DB2
SPECIFYING "ENVIRONMENT" AND REPOSITORY
WHICH LPAR IS PROJECT GETTING SOURCE CODE FROM
UPDATE SYNC FILE WITH SOURCE CODE INFORMATION ON LPAR

RUNNING BATCH COMMANDS

REFER TO USERS GUIDE FOR SYNTAX LOGGING IS IN VARIOUS LOCATIONS



CREATE NEW PROJECT INI FILE

FILE: HOSPBAT.INI

[ADNewProj]
ProjectName = "HOSPBAT"
Path = "C:\IBM AD\Mainframe Projects\HOSPBAT"
Environment = "zOS"
ProjectLanguages = "Assembler,Cobol"
DBTypes = "Relational"
MapTypes = "CICS (BMS)"
ProjectDBType = "SQL"
CCSEnvironment = "Default"
DBServerName = "SQLServer [127.0.0.1:1433]"
AttachToDB = "N"
EnableBRD = "Y"
EnableCross = "Y

LINE MODE COMMAND

C:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release\IBMApplicationDiscoveryBuildClient
/np "c:\IBM AD\BUILD_CLIENT_CNTL\HOSPBAT.ini



CREATE INI FILE TO ASSOCIATE LPAR TO PROJECT

FILE: HOSPBATLPAR.INI

[ProjectsActions]
AssociatezOS=[HOSPBAT,WASHSYS]

LINE MODE COMMAND

C:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\Release>IBMApplicationDiscoveryBuildConfiguration.exe / ba "c:\IBM AD\BUILD_CLIENT_CNTL\HOSPBATLPAR.ini"



POPULATE SOURCE CODE FROM LPAR, AND DO FULL BUILD

filename: SYNC.txt

HOSPBAT,PDS(MVS),DMOSHIE.HOSPITAL.COBOL,zOS Cobol,COBOL_MVS,WASHSYS HOSPBAT,PDS(MVS),DMOSHIE.HOSPITAL.COPYBOOK,Cobol Include,COPY,WASHSYS HOSPBAT,PDS(MVS),DMOSHIE.HOSPITAL.ASM,Assembler,ASSEMBLER,WASHSYS HOSPBAT,PDS(MVS),DMOSHIE.HOSPITAL.JCL,JCL,JCL,WASHSYS

LINE MODE COMMAND: COPY SOURCE CODE FROM LPAR WASHSYS

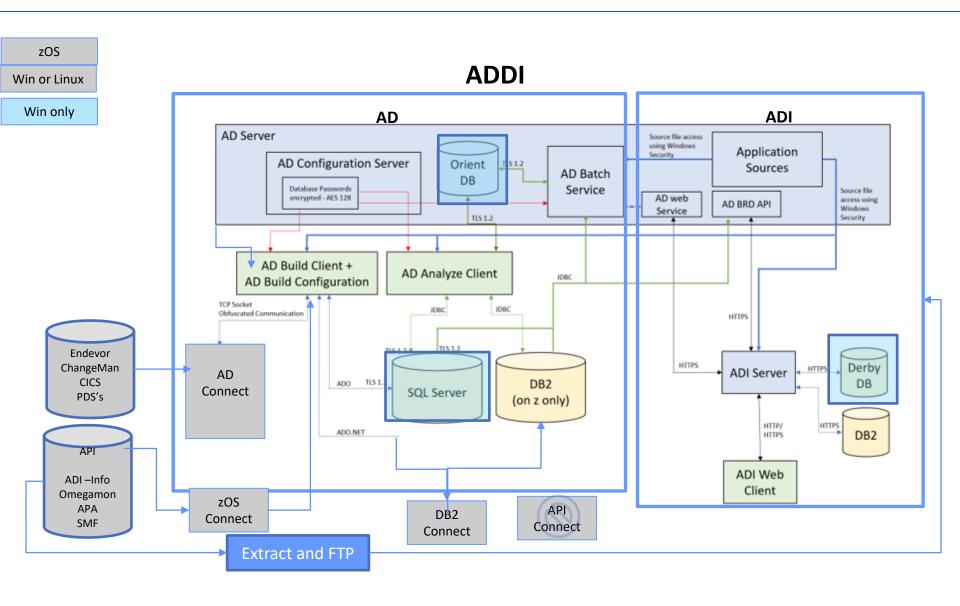
C:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\ReleaseIBMApplicationDiscoveryBuildClient / umm1 HOSPBAT

LINE MODE COMMAND: RUN FULL BUILD OF PROJECT

C:\Program Files\IBM Application Discovery and Delivery Intelligence\IBM Application Discovery Build Client\Bin\ReleaseIBMApplicationDiscoveryBuildClient /fb HOSPBAT



APPLICATION DISCOVERY ARCHITECTURE





INSTALLATION OF APPLICATION DISCOVERY

PLANNING

- BUILD CLIENT MUST RUN IN WINDOWS: WINDOWS SERVER OR WIN10
- AD SERVER CAN RUN IN MS SERVER OR LINUX
- REPOSITORY ON WINDOWS, LINUX, ZOS (SQL SERVER/DB2)
- AD CLIENT CAN BE IN ANY ECLIPSE SUPPORTED ENVIRONMENT
- ACTIVE DIRECTORY/SECURE STORAGE
- FIREWALL/PORT ADMINISTRATION

PREREQUISITES

- JAVA 8 (NOT JAVA 9 OR HIGHER)
- REPOSITORY (SQL SERVER, DB2)
- ACTIVE DIRECTORY SETUP
- ECLIPSE/IDz

IMPLEMENTION

- RUN INSTALLATION SCRIPT
- CONFIGURE SERVERS
- INSTALL PLUGIN FOR ANALYZE CLIENT
- CONFIGURE ANALYZE CLIENT



SERVER/LISTENER PORTS

SERVER	PORT
CONFIGURATOR SERVER	2181
SQL SERVER	1433
GRAPH DB	2424
FILE SERVER	7700
MAINFRAME PROJECT	7650
MANUAL RESOLUTIONS	7900
SEARCH SERVICE	7800



AD CONFIGURATION INFORMATION MAY BE STORED IN

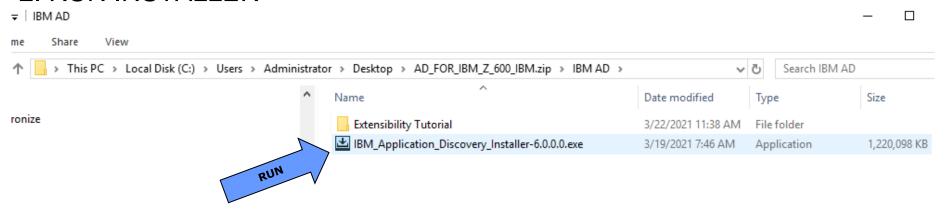
- SERVER "CONF" FILES
- SERVER "YAML" FILES
- .INI FILES
- SHARED FOLDERS:
 - 1. PROJECT
 - 2. SOURCE CODE
 - 3. MAINFRAME INI FILES
 - 4. INDEX FILES
- RELATIONAL DATABASE/REPOSITORY
- CONFIGURATION SERVER



RUN INSTALLATION PROGRAM

1. UNZIP ZIP FILE: ADDI_FOR_Z_600.ZIP

2. RUN INSTALLER

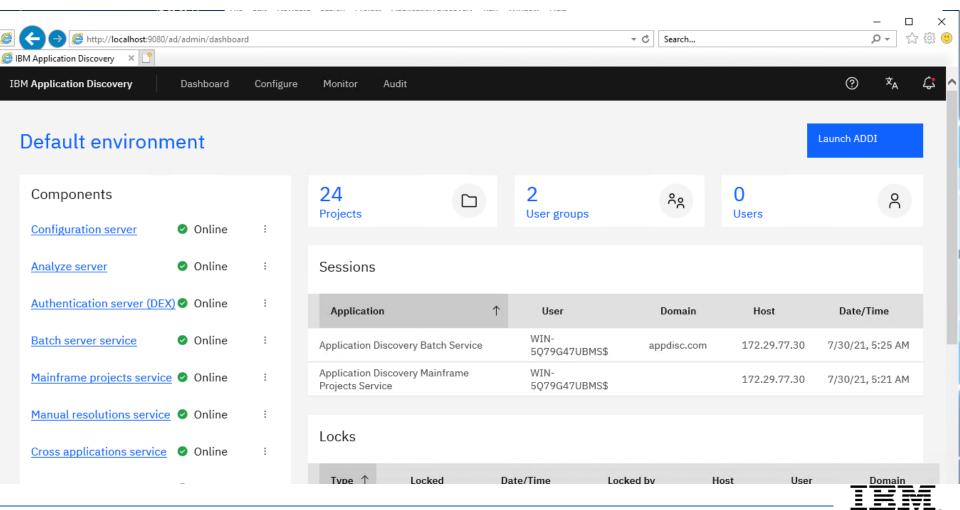




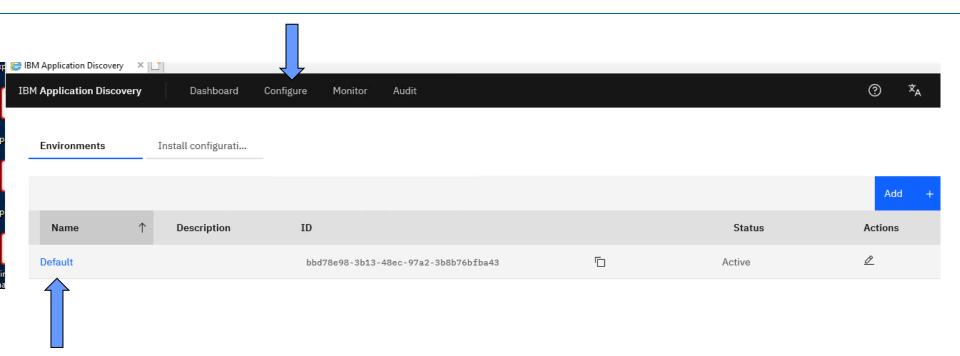
ACCESS ADDI CONFIGURATION DASHBOARD

http://localhost:9080/ad/admin/dashboard

CHECK STATUS OF THE SERVERS, SESSIONS



ACCESS ADDI DASHBOARD: CONFIGURE AND ACCESS ENVIRONMENT



"ENVIROMENT" ALLOWS FOR MULTIPLE AD SERVERS TO BE VIEWED BY CONFIGURATION SERVER.

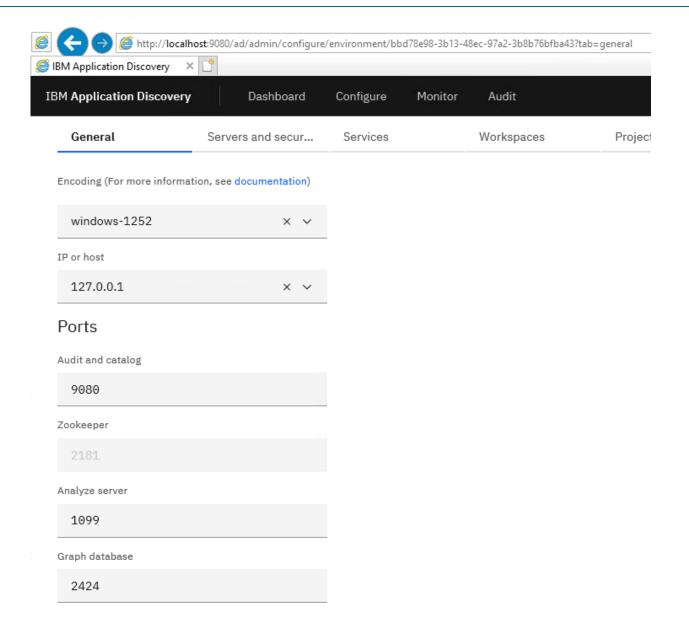
"ENVIRONMENT" PHYSICALLY SEPARATES AD PROJECTS. (IE. PROJECTS RESIDING ON ONE ENVIRONMENT IS NOT ACCESSIBLE ON A DIFFERENT ENVIRONMENT)

ENVIRONMENT ALLOWS FOR EXPANSION OF AD USAGE.

ENVIRONMENT ID IS USED WHEN CONFIGURING THE ANALYZE CLIENT.



CONFIGURE: GENERAL....THE HOST IP AND PORT NUMBERS





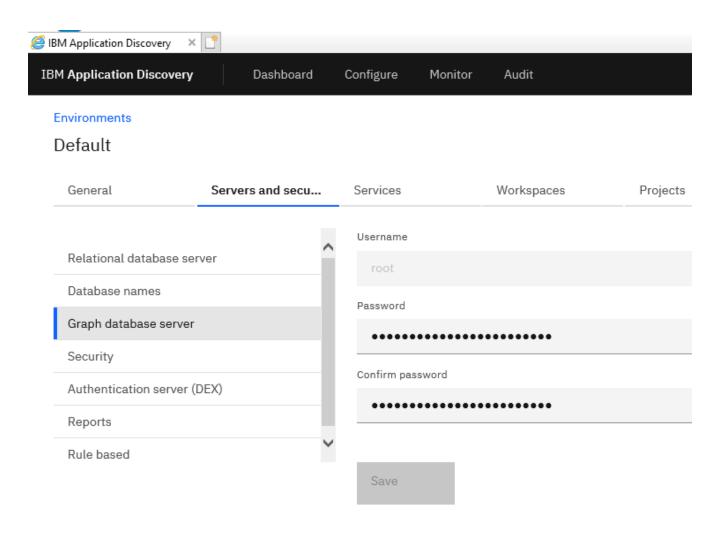
SQL DATABASE SPECIFICATIONS

M Application Discovery	Dashboard	Configure M	Monitor Audit		
General	Servers and secu	Services	Workspaces	Projects	User
Relational database ser	ver	Relational datab			
Database names		SQLServer ((127.0.0.1:1433)		~
Graph database server		Annotatio	ns database		
Security		Name			
Authentication server ([DEX)	EZ#Annota	tions		
Reports		Schema			
Rule based		dbo			
		Audit data	abase		
		Name			
		EZ#Audit			
		Cross ana	lysis database		
		Name			
		F7#0A			



GRAPHICS DATABASE

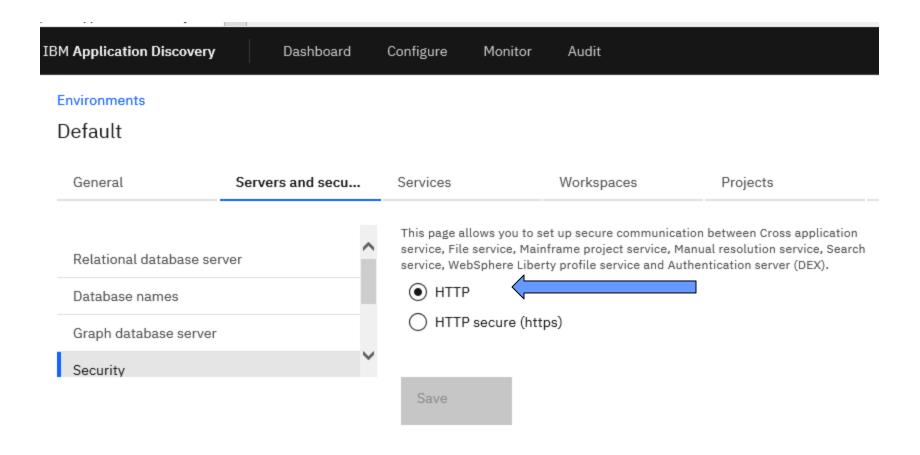
GRAPHICS DATABASE USAGE ENTAILS SETTING A PASSWORD FOR THE ROOT PASSWORD





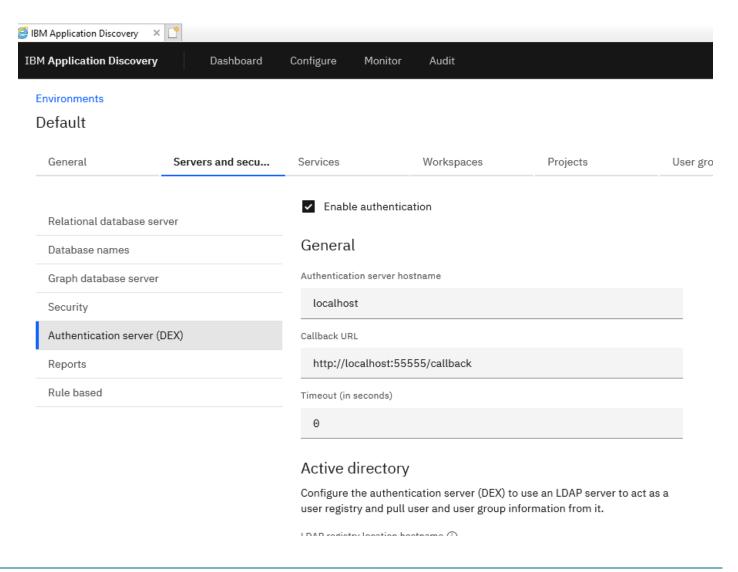
HTTP VS. HTTPS SETUP

IT is recommended to initially setup ADDI without HTTPS



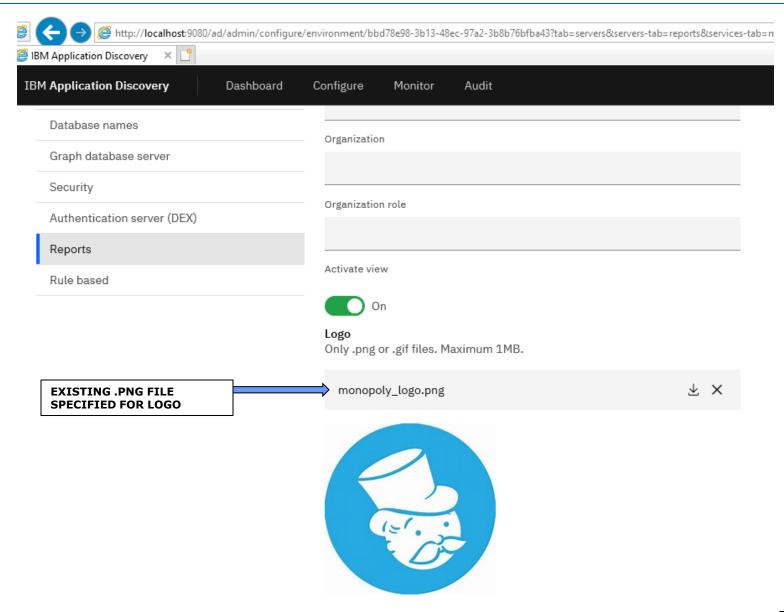


SETUP FOR DEX/OAUTH2



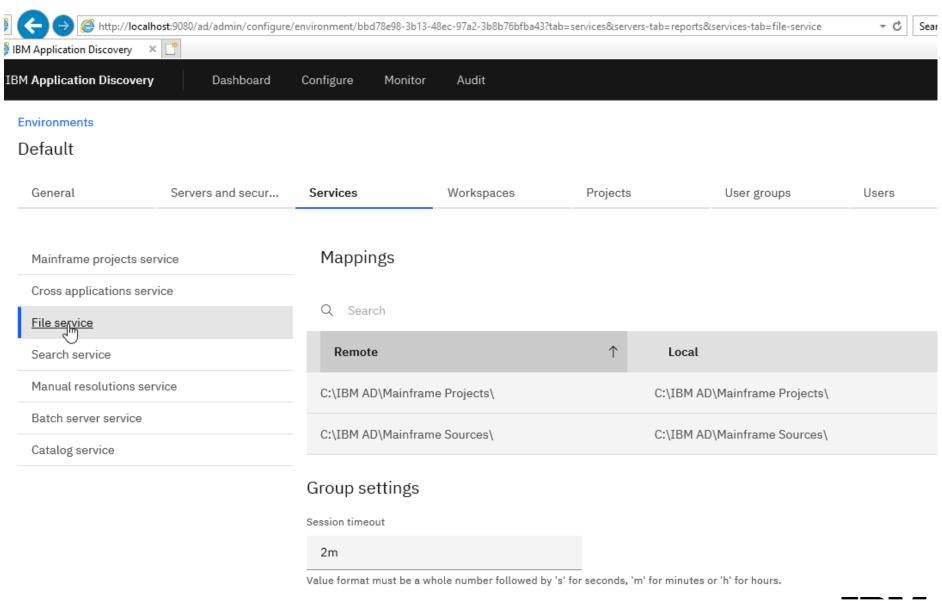


REPORTS CONFIGURATION: SET LOGO FOR REPORT OUTPUT



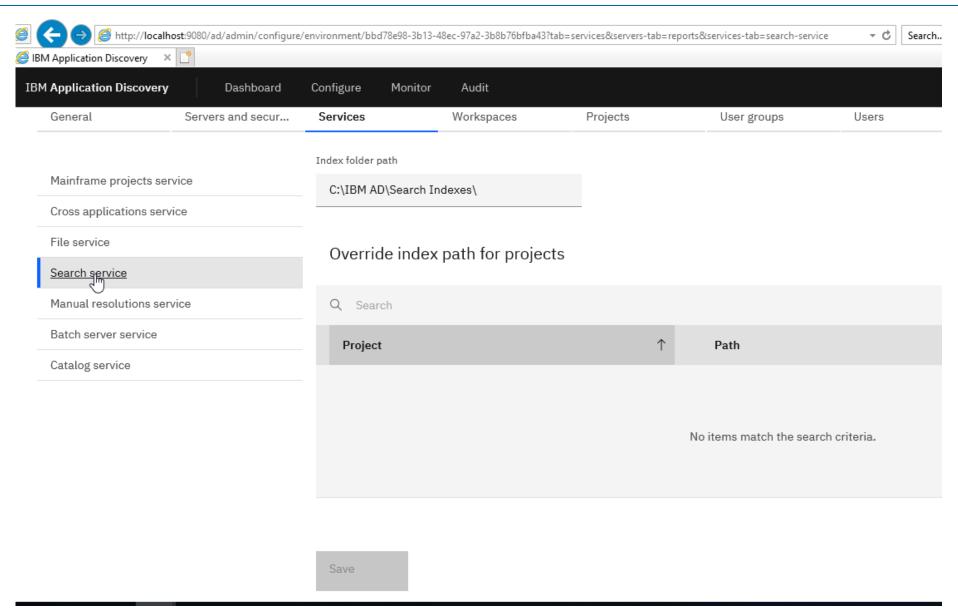


FILE SERVICE: SHARING SOURCE AND PROJECT FOLDERS



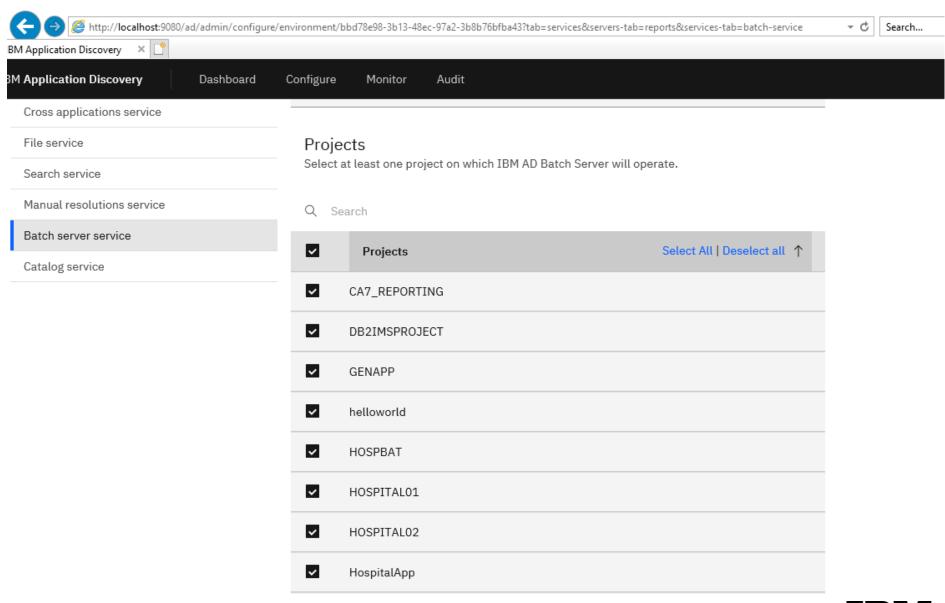


SEARCH SERVICE: SHARED FOLDERS TO MAINTAIN INDEXES



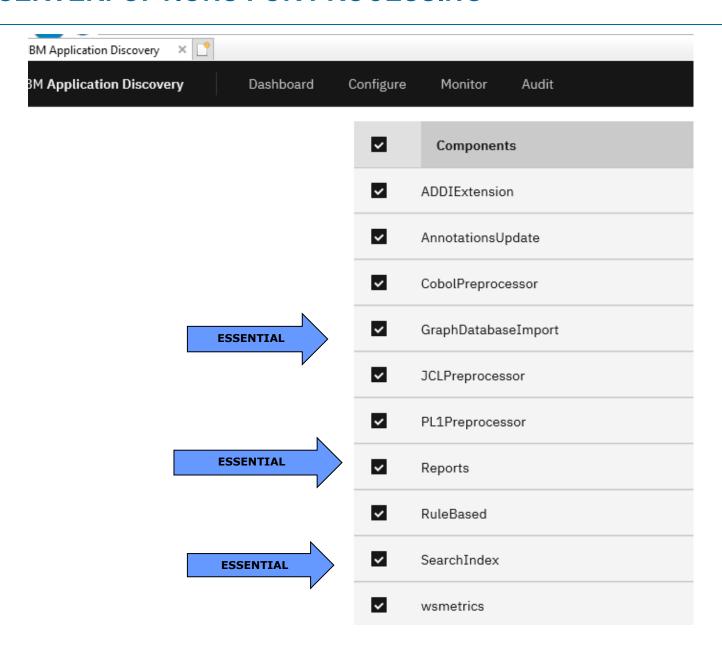


BATCH SERVER: PROJECTS MANAGED



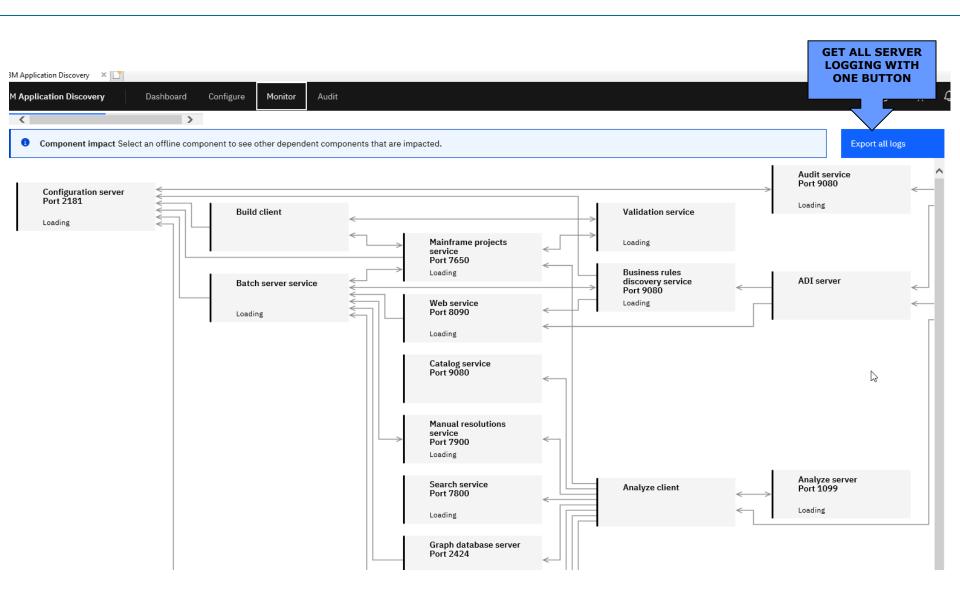


BATCH SERVER: OPTIONS FOR PROCESSING



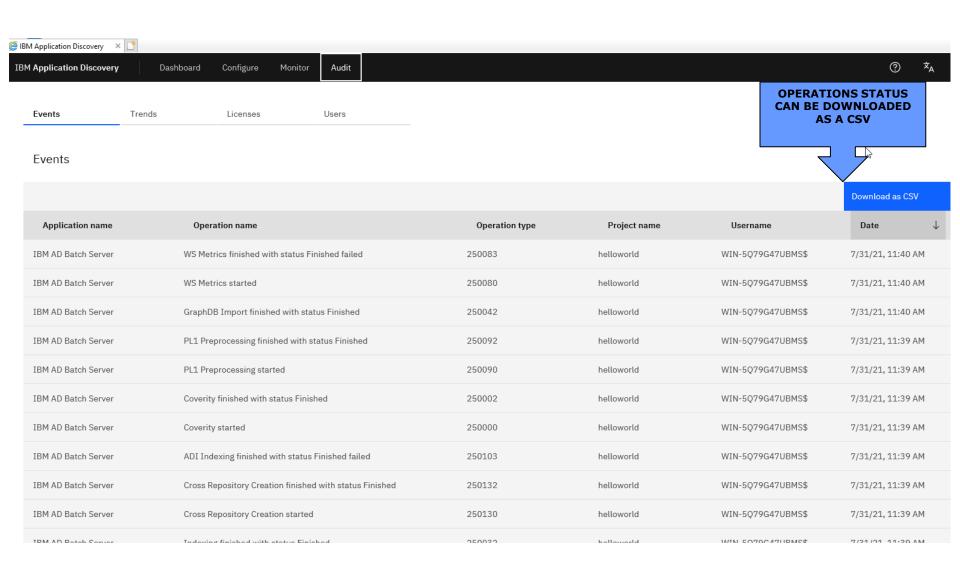


MONITOR: GET BIG PICTURE OF APPLICATION AND LOGGING





AUDIT





PROJECTS

Environments

Default

General Servers and secur... Services Workspaces **Projects** User groups Users

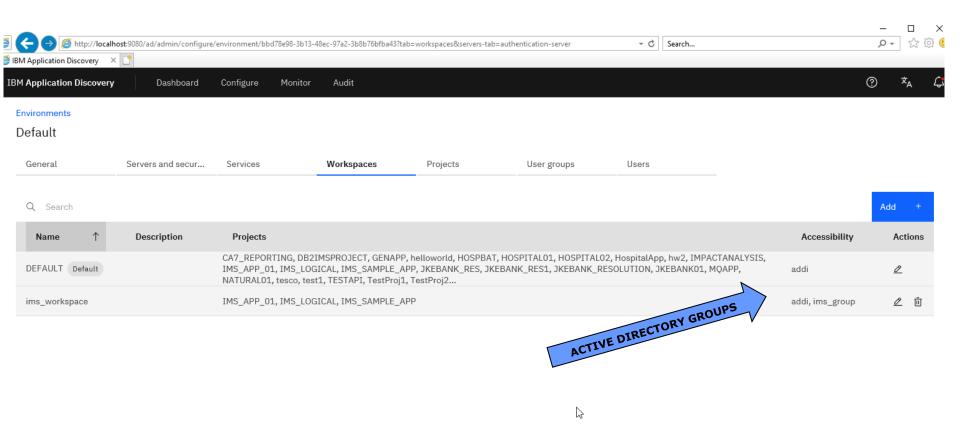
Q Search

Project name ↑	Description	Project type	Local project path	Relational database name	Business rules discovery	Cross application
CA7_REPORTING		mainframe	C:\IBM AD\Mainframe Projects\CA7_REPORTING	EZ_CA7_REPORTING	Disabled	Disabled
DB2IMSPROJECT		mainframe	C:\IBM AD\Mainframe Projects\DB2IMSPROJECT	EZ_DB2IMSPROJECT	Disabled	Disabled
GENAPP		mainframe	C:\IBM AD\Mainframe Projects\GENAPP	EZ_GENAPP	Disabled	Enabled
helloworld		mainframe	C:\IBM AD\Mainframe Projects\helloworld	EZ_helloworld	Disabled	Disabled
HOSPBAT		mainframe	C:\IBM AD\Mainframe Projects\HOSPBAT	EZ_HOSPBAT	Enabled	Enabled 📐
HOSPITAL01		mainframe	C:\IBM AD\Mainframe Projects\HOSPITAL01	EZ_HOSPITAL01	Enabled	Enabled
HOSPITAL02		mainframe	C:\IBM AD\Mainframe Projects\HOSPITAL02	EZ_HOSPITAL02	Enabled	Enabled



WORKSPACES: LOGICAL MANAGE PROJECT ACCESS

WINDOW ACTIVE DIRECTORY USERS WITH GROUP ACCESS TO ADDI CAN ACCESS ALL PROJECTS.
WINDOW ACTIVE DIRECTORY USERS WITH GROUP ACCESS IMS_GROUP CAN ONLY ACCESS PROJECTS IN IMS_WORKSPACE



______®

Cleaning up the OrientDB database

About this task

- The OrientDB Maintenance script can be used to clean up the OrientDB database. The script identifies the
- ▶ OrientDB databases that are not longer referenced by the symbolic links and deletes them. The
- OrientDBDatabaseMaintenance-x.x.bat script is located in the <IBM ADDI Installation</p>
- ► Folder>\support\OrientDBDatabaseMaintenance\ folder.
- ▶ **Note:** For security reasons, the deletion steps are commented (REM) at lines 255 and 257.

Procedure

- ▶ 1. Go to <IBM ADDI Installation Folder>\support\OrientDBDatabaseMaintenance\ folder
- and run the OrientDBDatabaseMaintenance-x.x.bat script.
- ▶ 2. If unnecessary database folders are found, use option Y (Yes) to remove all unused database
- folders.
- ▶ 3. Check the logs under the C:\ADlogs\BatchServer\orientdb\MaintenanceLogs\ folder to
- review any database folder name that was removed.

Results

All unused database folders are removed



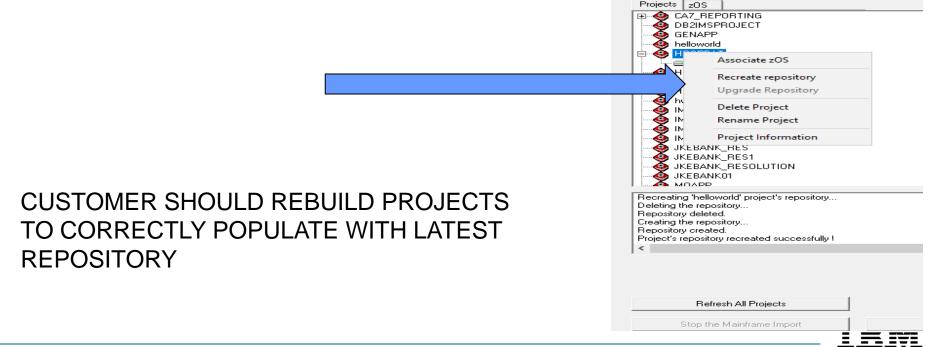
UPGRADING APPLICATION DISCOVERY

RERUN INSTALLATION SCRIPT TO REPLACE MAINTAINED CODE

REINSTALL NEW ECLIPSE PLUG-IN, AND CONFIGURE ANALYZE CLIENT

REPOSITORY IS LIKELY UPDATED IN TERMS FOR NEW FIELDS IN EXISTING TABLES AND NEW TABLES. REPOSITORY UPGRADE DONE IN BUILD CONFIGURATOR

Projects on the CCS and users connected to them:



UNLOCK TRIAL VERSION OF APPLICATION DISCOVERY

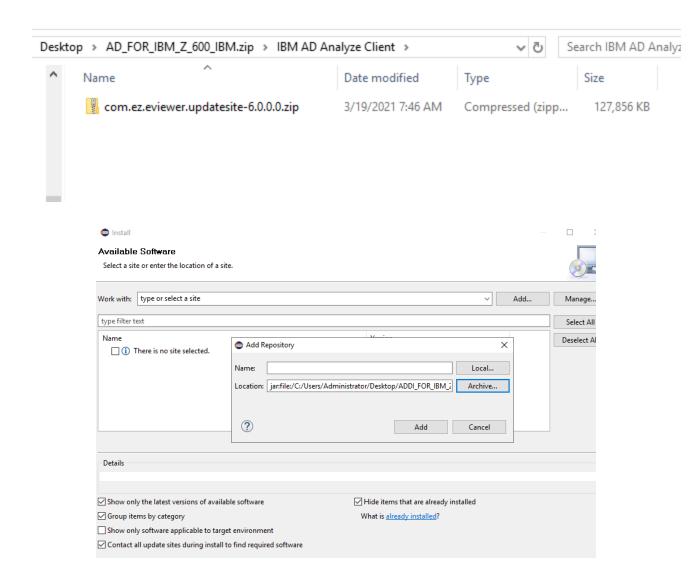
INSTALLATION IS INITIALLY LIMITED TO 5 PROJECTS

LICENSED CUSTOMER CAN DOWNLOAD "ACTIVATION KIT" FROM PASSPORT ADVANTAGE

RUN ADACTIVATION.EXE IN ADMINISTRATION MODE

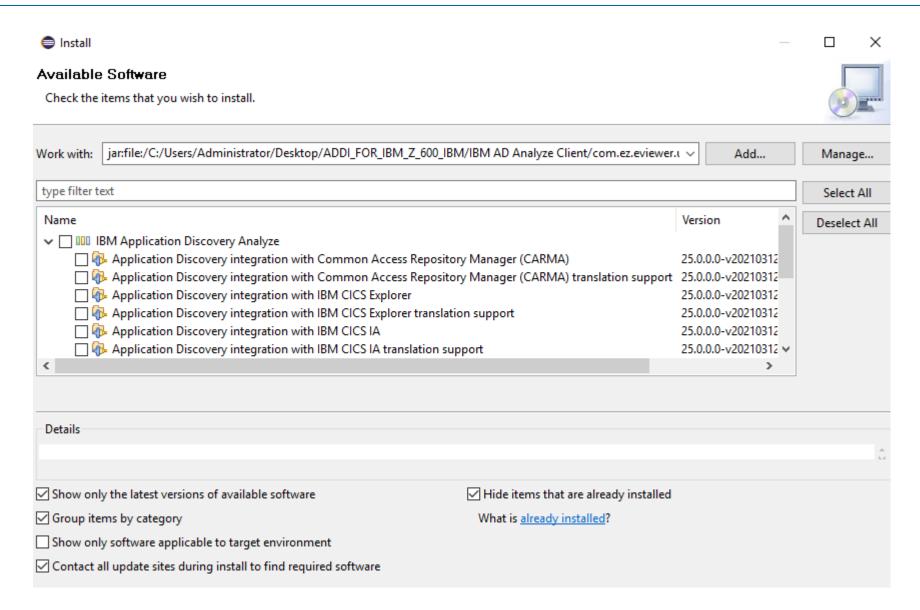


ANALYZE CLIENT ECLIPSE PLUGIN





COMPONENTS IN PLUGIN: SELECT



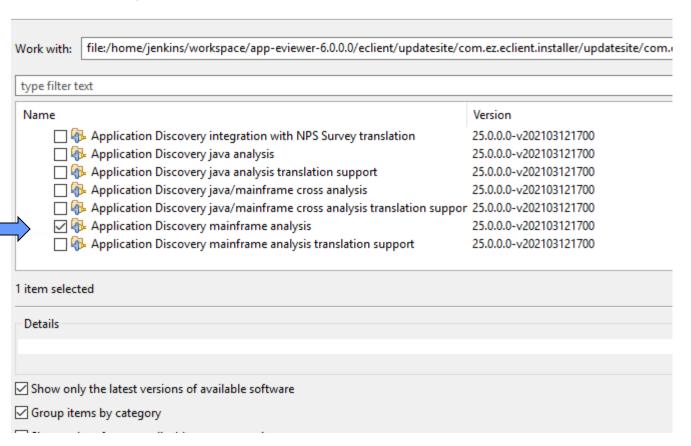


SELECT MAINFRAME ANALYSIS



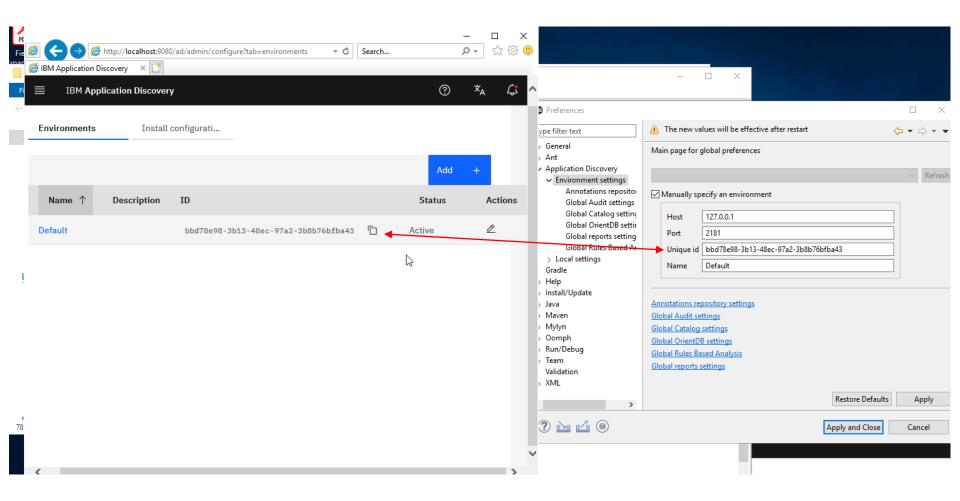
Available Software

Check the items that you wish to install.



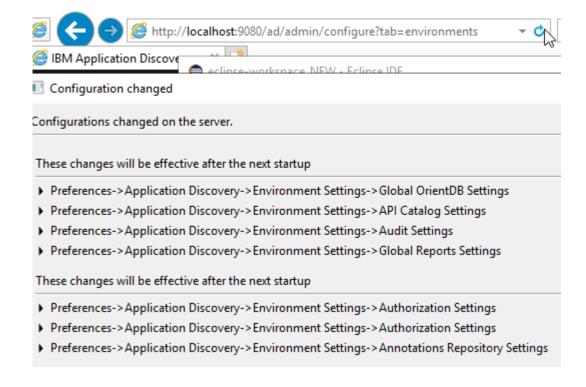


UPDATE ANALYZE CLIENT WITH ENVIRONMENT ID/NAME, HOST, PORT



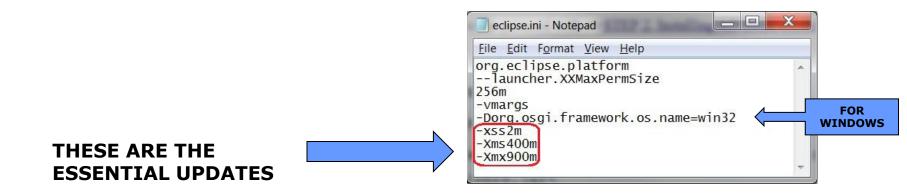


ANALYZE CLIENT RESTART SHOWS UPDATE TO PREFERENCES





ECLIPSE.INI FILE UPDATES

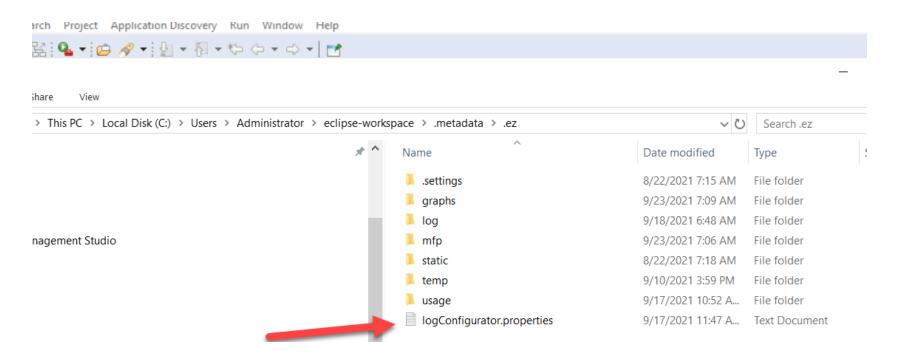


REFER TO AD USERS GUIDE FOR MORE DETAILS.



DEBUGGING ANALYZE CLIENT....LOGGING FOR IBM LEVEL 2 SUPPORT

- IBM LEVEL 2 SUPPORT NEEDS TO ENSURE ALL ANALYZE CLIENT DIAGNOSTICS BE SAVED TO A SINGLE LOG FILES
- IN FOLDER:





DEBUGGING ANALYZE CLIENT....LOGGING FOR IBM LEVEL 2 SUPPORT

LogConfiguration.properties

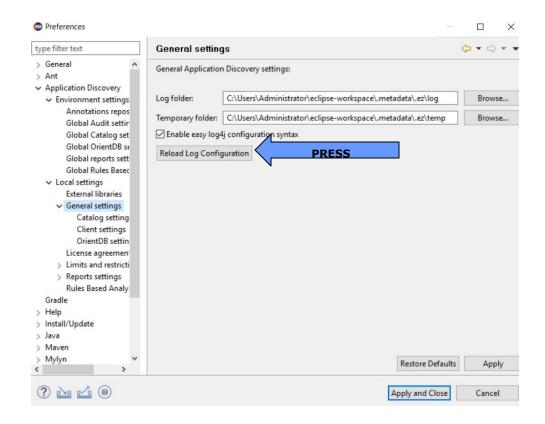
```
logConfigurator.properties - Notepad

File Edit Format View Help

com.ibm=all

com.ez=all
```

IN AD ECLIPSE PREFERENCES:





WHAT TO SUBMIT TO IBM LEVEL 2 SUPPORT

.log file This has logging for the ECLIPSE/IDz environment example: C:\Users\Administrator\eclipse-workspace\.metadata\.log .log file is to be submitted to IBM Support

log folder containing ez.log file and other ADDI configuration settings via zip example: C:\Users\Administrator\eclipse-workspace\.metadata\.ez

zip .ez folder for submission to IBM Support

.... note that ez.log file is contained in log folder below (blue arrow)

