

# Open Front Ends

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# Eclipse Plugin – Current Features

- Load functions stored in apl-files from eclipse project into interpreter workspace
  - At runtime renew interpreter workspace if changed content of eclipse project
- Launch local interpreter (or other executable), setting working directory and environment variables
- Connect to remote / running interpreter
- Execute APL function or interpreter command just after loading eclipse project
- Debugger (see next slide)
- Workspace Explorer
- Session console with command history for each interpreter.
- Open editor for function at cursor by pressing key combination Shift+Enter



# Eclipse Debugger Features

- List of launched or connected sessions, suspended threads and their's stack frames
- Standard functions for turing Suspend, Resume, Step Into, Step Over, Drop Frame, Step Return
- Indicating linebreakpoint and current instruction pointer in editor annotation ruler
- Variable view with a short textual representation of variables values
- Breakpoints manager which allow toggle all installed breakpoints or disable them



# Eclipse Plugin – Planned Features

- Debugger support for functions from interpreter workspace
- Autocompletion proposals at runtime
- Import/export functions in eclipse project from/to dws-files
- Syntax coloring and validator for editor
- Code refactoring for renaming functions and variables



Ride Multi Monitor [Server - MASTER.dws]

Dashboard Detail

DFS

Sofia Server

MASTER@phantom63:18000 !	ANFS@phantom63:18001 !	FILE1@phantom63:18021	FILE2@phantom63:18022 !	FILE3@phantom63:18023 !
FILE4@phantom63:18024 !	FILE5@phantom63:18025 !	FILE6@phantom63:18026 !	FILE7@phantom63:18027 !	FILE8@phantom63:18028 !
FILE9@phantom63:18029 !	FILE10@phantom63:18030 !	CFF@phantom63:18040 !	HRQ@phantom63:18050 !	GETSP@phantom63:18051 !
CAL1@phantom63:18061	CAL2@phantom63:18062	BACKUP@phantom63:18070 !		



Ride Multi Monitor [<Disconnected>] — □ ×

Dashboard Detail

- FileServer2 - 1@phantom63:8971 I
- FileServer3 - 1@phantom63:8981 I
- FileServer4 - 1@phantom63:8991 I
- ⤴ Sofia Server
- MASTER@phantom63:18000 I
- ANFS@phantom63:18001 I
- FILE1@phantom63:18021 I
- FILE2@phantom63:18022 I
- FILE3@phantom63:18023 I
- FILE4@phantom63:18024 I
- FILE5@phantom63:18025 I
- FILE6@phantom63:18026 I
- FILE7@phantom63:18027 I
- FILE8@phantom63:18028 I
- FILE9@phantom63:18029 I
- FILE10@phantom63:18030 I
- CFF@phantom63:18040 I
- HRQ@phantom63:18050 I
- GETSP@phantom63:18051 I
- CAL1@phantom63:18061 I
- CAL2@phantom63:18062 I
- BACKUP@phantom63:18070 I

**Ride it!** <Disconnected>

```

EXECUTING INIT FUNCTION: #.AFU...INIT_SAFU
----- START----- START----- START----- START----- START----- START-----
Reading configuration file: c:\sofiaw\DFSTest\Conf\DFSTest.txt
2016-10-06 10:56:41 SRV ----- START----- START----- START----- START----- START-----
START----- START-----
2016-10-06 10:56:41 SRV Read configuration file: c:\sofiaw\DFSTest\Conf\DFSTest.txt
2016-10-06 10:56:41 SRV trap_srv_errors: 2
2016-10-06 10:56:41 SRV [MASTER] Connecting to: 127.0.0.1:6331 ...
2016-10-06 10:56:41 SRV [MASTER] Connected
2016-10-06 10:56:41 SRV [MASTER] Connection established
2016-10-06 10:56:41 SRV [MASTER] Ready
2016-10-06 10:56:41 SRV Starting Server: 27, FILE7
2016-10-06 10:56:41 SRV Process ID: 5572
2016-10-06 10:56:41 SRV Starting service: MFS7
2016-10-06 10:56:41 SRV Reading: tCONST
2016-10-06 10:56:41 SRV Reading: T_SofVer
2016-10-06 10:56:41 SRV Reading: T_ORD
2016-10-06 10:56:41 SRV [ANFS] Connecting to: 127.0.0.1:55116 ...
2016-10-06 10:56:42 SRV [ANFS] Connected
2016-10-06 10:56:42 SRV [ANFS] Connection established
2016-10-06 10:56:42 SRV [ANFS] Ready
2016-10-06 10:56:42 SRV Initializing service: MFS7 in thread: 39
2016-10-06 10:56:42 MSV Logging level: 1
2016-10-06 10:56:42 MSV Use NEWCACHE: 0
2016-10-06 10:56:42 MSV Reading Configuration from c:\sofiaw\DFSTest\Conf\DFSTest.txt
2016-10-06 10:56:42 MSV Starting MFS File Server #7
2016-10-06 10:56:42 MSV Error trap level is 2: All Operations
2016-10-06 10:56:42 MSV MFS Data Path is \\APLSTORE02\DISCOS\DFSTEST\DB\
2016-10-06 10:56:42 MSV \\APLSTORE02\DISCOS\DFSTEST\DB\COMMIT7.MSV is empty
2016-10-06 10:56:42 MSV Listener for: MFS7 created on port: 55142
2016-10-06 10:56:42 MSV Started: MFS Server #7
2016-10-06 10:56:42 SRV Started: MFS Server #7
2016-10-06 10:56:42 SRV All services started successfully
2016-10-06 10:56:46 SRV MFS7 Task: 1001 initiated from: 127.0.0.1
2016-10-06 10:56:46 SRV MFS7 Task: 1002 initiated from: 127.0.0.1
2016-10-06 10:56:46 SRV MFS7 Task: 1003 initiated from: 127.0.0.1
2016-10-06 10:56:47 MSV User: [CAL2] connected from: 127.0.0.1
2016-10-06 10:56:47 SRV MFS7 Task: 1004 initiated from: 127.0.0.1
2016-10-06 10:56:47 MSV User: [GETSP] connected from: 127.0.0.1
2016-10-06 10:56:47 MSV User: [CAL1] connected from: 127.0.0.1
2016-10-06 10:56:47 MSV User: [CFF] connected from: 127.0.0.1
2016-10-06 10:56:47 SRV MFS7 Task: 1005 initiated from: 127.0.0.1
2016-10-06 10:56:47 MSV User: [HRQ] connected from: 127.0.0.1
2016-10-06 10:56:54 MSV Opening: \\APLSTORE02\DISCOS\DFSTEST\DB\SOFDXPB.MFS
2016-10-06 10:56:55 MSV mALLK completed for file: \\APLSTORE02\DISCOS\DFSTEST\DB\SOFDXPB
                
```

**2016-10-06 10:58:57**

Session

► Connection FILE7@phantom63:18027

Group	Sofia Server
Idle	True
InError	False
LastConnectedAt	10/6/2016 10:57:03 AM
LastErrorAt	10/6/2016 10:56:05 AM
LastMessageAt	10/6/2016 10:57:03 AM
Stuck	False
WsId	<Disconnected>

Properties  
Threads

#dyalog16

Open Front Ends

Ride Multi Monitor [Server - MASTER.dws]

Dashboard Detail

DFS

FileServer1 - 2@phantom63:8962 E	FileServer1 - 3@phantom63:8963 E	FileServer2 - 2@phantom63:8972 E	FileServer2 - 3@phantom63:8973 E	FileServer3 - 2@phantom63:8982 E
FileServer3 - 3@phantom63:8983 E	FileServer4 - 2@phantom63:8992 E	FileServer4 - 3@phantom63:8993 E	Monitor@phantom63:8800	Master@phantom63:8801
Lock@phantom63:8802	FileServer1@phantom63:8806	FileServer2@phantom63:8807	FileServer3@phantom63:8808	FileServer4@phantom63:8809
FileServer1 - 1@phantom63:8961	FileServer2 - 1@phantom63:8971	FileServer3 - 1@phantom63:8981	FileServer4 - 1@phantom63:8991	

Sofia Server

BACKUP@phantom63:18070 E	MASTER@phantom63:18000	ANFS@phantom63:18001	FILE1@phantom63:18021	FILE2@phantom63:18022
FILE3@phantom63:18023	FILE4@phantom63:18024	FILE5@phantom63:18025	FILE6@phantom63:18026	FILE7@phantom63:18027
FILE8@phantom63:18028	FILE9@phantom63:18029	FILE10@phantom63:18030	CFF@phantom63:18040	HRQ@phantom63:18050
GETSP@phantom63:18051	CAL1@phantom63:18061	CAL2@phantom63:18062		



Ride Multi Monitor [<Disconnected>]

Dashboard Detail

- FileServer1 - 2@phantom63:8962 E
- FileServer1 - 3@phantom63:8963 E
- FileServer2 - 2@phantom63:8972 E
- FileServer2 - 3@phantom63:8973 E
- FileServer3 - 2@phantom63:8982 E
- FileServer3 - 3@phantom63:8983 E
- FileServer4 - 2@phantom63:8992 E
- FileServer4 - 3@phantom63:8993 E
- Monitor@phantom63:8800 I
- Master@phantom63:8801 I
- Lock@phantom63:8802 I
- FileServer1@phantom63:8806 I
- FileServer2@phantom63:8807 I
- FileServer3@phantom63:8808 I
- FileServer4@phantom63:8809 I
- FileServer1 - 1@phantom63:8961 I
- FileServer2 - 1@phantom63:8971 I
- FileServer3 - 1@phantom63:8981 I
- FileServer4 - 1@phantom63:8991 I
- Sofia Server
- BACKUP@phantom63:18070 E
- MASTER@phantom63:18000 I

```

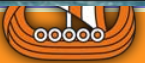
Ride it! <Disconnected>
SALT initialization failed: Unable to open file
Executing init functions:  __Init_pINI  __Init_AFAA  __Init_AFSS  __Init_AFUB
__Init_AINI_OS __Init_D_OS __CRC: __Init
__D_CRC MFU __Init_SMFU __Init_SMFX __Init_WOPT PLUS __Init_WPLU
DFS: phantom63
I4
\42a1gkxr2lef
Parametri iniz
=====
APL Italiana development system per dyalog
Version
=====
APL Italiana srl - Milano      Tutti i diritti riservati
Versione 3.0 - del 14/09/16     COPYRIGHT 1987-2016

Utilizza materiale Copyright Dyalog

----- START-----
Cardif Milano
Reading config
2016-10-06 11:03:06 SRV Executing init function: #.__Init_AINI
2016-10-06 11:03:06 SRV Executing init function: #.HLP.__Init_WHLP
2016-10-06 11:03:06 SRV Executing init function: #.AFU.__Init_SAFU
2016-10-06 11:03:06 SRV ----- START----- START----- START----- START----- START-----
2016-10-06 11:03:06 SRV Reading configuration file: c:\sofiaw\DFSTest\Conf\DFSTest.txt
2016-10-06 11:03:06 SRV ----- START----- START----- START----- START----- START-----
2016-10-06 11:03:06 SRV 2016-10-06 11:03:06 SRV Read configuration file: c:\sofiaw\DFSTest\Conf\DFSTest.txt
2016-10-06 11:03:06 SRV trap_srv_errors: 2
2016-10-06 11:03:06 SRV [MASTER] Connecting to: 127.0.0.1:6331 ...
2016-10-06 11:03:07 SRV [MASTER] Connected
2016-10-06 11:03:07 SRV [MASTER] Connection established
2016-10-06 11:03:07 SRV [MASTER] Ready
2016-10-06 11:03:07 SRV Starting Server: 70, BACKUP
2016-10-06 11:03:07 SRV Process ID: 5036
2016-10-06 11:03:07 SRV Starting service: BACKUP
2016-10-06 11:03:07 SRV Initializing service: BACKUP in thread: 39
2016-10-06 11:03:07 BAK Logging level: 1
2016-10-06 11:03:07 BAK Backup schedule updated
2016-10-06 11:03:07 BAK Listener for: BACKUP created on port: 55573
2016-10-06 11:03:07 SRV Started
2016-10-06 11:03:07 SRV All services started successfully
2016-10-06 11:03:27 SRV *** STOP ***
2016-10-06 11:03:27 SRV
2016-10-06 11:03:27 SRV _MsgPump[31]STOP:
2016-10-06 11:03:27 SRV ^
To resume, type:
-RESTART

_MsgPump[38]
    
```

Connection	BACKUP@phantom63:18070	Properties
Group	Sofia Server	
Idle	False	





# RIDE 4.0 ToDo List

- Maintain upwards compatibility:  
APL 15+16 & RIDE 3&4
- Raspberry Pi Version
- Default IDE for Linux as well as macOS
- Zero footprint version
  - Start APL web server & point a browser at it
- Create ssh tunnel to connect to existing process



# RIDE 4.0 ToDo List

- Identical Formatting of Code ODE+RIDE
- Session search / fn within Class or NS
- Set options from RIDE
  - Single trace window
  - Pause on error
- Show Stack, Thread Menu
- AutoPW support



# Layout Options – Vote?

- Floating Windows
- ODE style Docked
- "Golden"

