

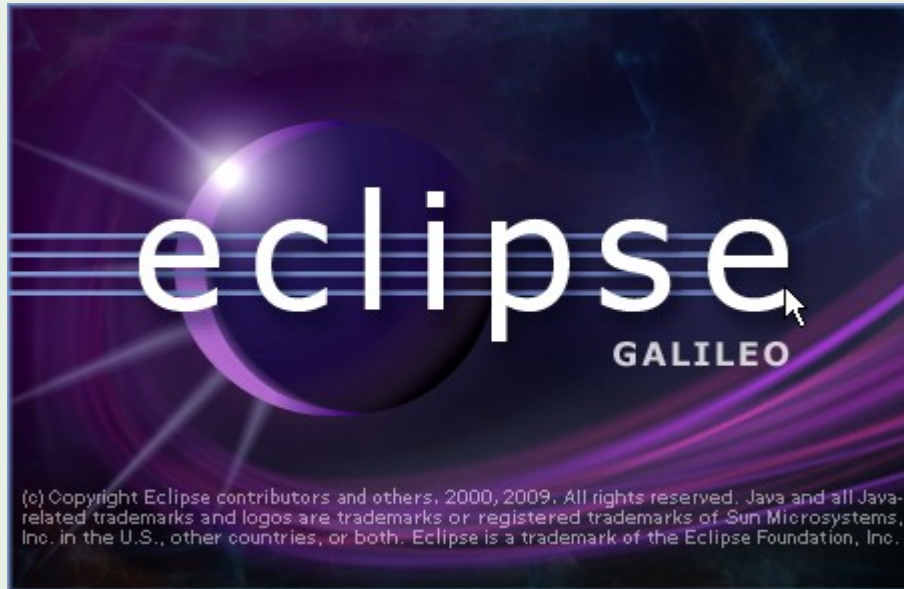


Commitwork Developer Suite

Eclipse for Cobol85, Screen Cobol and Tal

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What is Eclipse



What is Eclipse

Eclipse is an Open Source software development toolset for different programming languages, consisting of an integrated development environment (IDE) and a huge amount of plug-ins.

Originally written in Java, Eclipse was used to develop Java applications and in the mean time it can be used - because of the huge plug-in set - for other languages as well, including C, C++, COBOL and others.

Source: Wikipedia

What is Eclipse ?

Eclipse is including:

- Views:
 - Project catalog
 - History
 - Protocol
- Editors:
 - Individual editors for each language
 - Syntax highlighting
 - Historical comparisons
- Perspectives:
 - Individual arrangement of menus, views and editors

**Eclipse is
one environment for the perfect software development**

What is Eclipse

- Integration of the Concurrent Versioning System (**CVS**).
- **CVS** runs well on the NonStop
- An alternative for **CVS** could be **Subversion**

Eclipse – compare with history

Local: sstsfg02.cob

```
522 01 WS-STKSTK-STATUS PIC 9.
523 88 WS-STKSTK-GEAENDERT VALUE 0.
524 88 WS-STKSTK-NICHT-GEAENDERT VALUE 1.
525 01 WS-STUECK-IST-RISS PIC 9.
526 01 WS-FERTIGMELDUNG PIC 9.
527 88 WS-FERTIGMELDUNG-OK VALUE 0.
528 88 WS-FERTIGMELDUNG-DOPPELT VALUE 1.
529
530 *V34A
531 01 WS-FEHLER-4 PIC X(4).
532 01 WS-FEHLER-R REDEFINES WS-FEHLER-4.
533 02 WS-FEHLER-NUM PIC 9(4).
534 *V34E
535
536 ** Serverspezifische Parameter
537 01 WS-NUM PIC Z29.
538 01 WS-PARAM-NAME-1 PIC X(30) VALUE "EMPFANGSRECHNER"
539
540 01 WS-PARAM-TEXT-1.
541 05 WS-PARAM-LAENGE-1 PIC S9(4) COMP.
542 05 WS-EMPFANGSRECHNER-5011 PIC X(2).
543 05 FILLER PIC X(253).
544
545
546 ?HEADING "PROCEDURE DIVISION/DECLARATIVES"
547 /
548 PROCEDURE DIVISION.
549
550 DECLARATIVES.
551
552 COPY DECLARATIVE-SERVER-PROCS OF "LCKSF02"
553 REPLACING ==#PROGRAMM-NAME#== BY =="STSFERT"==.
554
555 END DECLARATIVES.
556
```

Local history: sstsfg02.cob 18.05.2010 15:23:42

```
509 01 WS-STKSTK-STATUS PIC 9.
510 88 WS-STKSTK-GEAENDERT VALUE 0.
511 88 WS-STKSTK-NICHT-GEAENDERT VALUE 1.
512 01 WS-STUECK-IST-RISS PIC 9.
513 01 WS-FERTIGMELDUNG PIC 9.
514 88 WS-FERTIGMELDUNG-OK VALUE 0.
515 88 WS-FERTIGMELDUNG-DOPPELT VALUE 1.
516
517 ** Serverspezifische Parameter
518 01 WS-NUM PIC Z29.
519 01 WS-PARAM-NAME-1 PIC X(30) VALUE "EMPFANGSREC"
520
521 01 WS-PARAM-TEXT-1.
522 05 WS-PARAM-LAENGE-1 PIC S9(4) COMP.
523 05 WS-EMPFANGSRECHNER-5011 PIC X(2).
524 05 FILLER PIC X(253).
525
526
527 ?HEADING "PROCEDURE DIVISION/DECLARATIVES"
528 /
529 PROCEDURE DIVISION.
530
531 DECLARATIVES.
532
533 COPY DECLARATIVE-SERVER-PROCS OF "LCKSF02"
534 REPLACING ==#PROGRAMM-NAME#== BY =="STSFERT"==.
535
536 END DECLARATIVES.
537
538 ?HEADING "PROCEDURE DIVISION - MAIN"
539 /
540 0100-MAIN SECTION.
541 *****
542 *#
543 *# 0100 MAIN .
```

Problems Declaration Console History Error Log Progress Spooler List Spooler Job SQL Table View SQL Table Cache View

istsfg02.cob

Revision Time

- 18.05.10 15:26
- 18.05.10 15:23
- 18.05.10 15:23
- 03.05.10 12:58

Where to find Eclipse

<http://www.eclipse.org/>

Commitwork Developer Suite



The highlights at a glance

The screenshot displays the Eclipse IDE interface for editing a COBOL program. The main editor window shows the following code with syntax highlighting:

```

2038      PERFORM 5000-040-INSERT-AUSFAL
2039      END-IF
2040      * PERFORM 5000-070-INSERT-KWSCHW VARYING WS-SCHW FROM 1 BY 1 UNTIL
2041      *           WS-SCHW > SCHWEISSN-ANZ OF M-AD-A52-2-IN
2042      *           OR NOT WS-SF-CONTINUE
2043      MOVE K-NEIN TO WS-MIT-LVS
2044      PERFORM 5100-010-GET-PARAM-1
2045      IF WS-SF-CONTINUE
2046      *V16
2047      AND WS-ARB105 NOT = K-JA
2048      PERFORM 5000-080-LAGER
2049      END-IF
2050      IF WS-SF-CONTINUE
2051      PERFORM 5000-090-PS-SFZBPP
2052      END-IF
2053      *V11
2054      * IF AGGREGAT-IST OF M-AD-A52-2-IN = "AGG530"
2055      *   EXIT SECTION
2056      * END-IF
2057      IF WS-SF-CONTINUE1 AND
2058      ERZ-FEHLER OF S-AD-A52-2-OUT OF M-AD-A52-2-IN > ZERO
2059      PERFORM 5000-100-SPERRE
2060      END-IF
2061      IF WS-SF-CONTINUE AND KZ-HASPELDREHEN OF M-AD-A52-2-IN NOT = 2
2062      AND AGGREGAT-IST OF M-AD-A52-2-IN NOT = "AGG510"
2063      *V11
2064      AND AGGREGAT-IST OF M-AD-A52-2-IN NOT = "AGG530"
2065      *V16
2066      AND WS-ARB105 NOT = K-JA
2067      PERFORM 5000-110-SPERRE
2068      END-IF
  
```

The left sidebar shows a project tree for 'TKS Bochum Cobol High' with various COBOL files listed. The right sidebar shows an 'Outline' view with a list of program sections. The bottom console window displays a table of reports:

No	Report	Location	#Pages	Status	#Copies	Date
761	KRUPP CW	#RW78	24	Ready	1	29.01.2010 15:54:23
760	KRUPP CW	#NBATCH	1	Ready	1	29.01.2010 15:54:23
759	E5541174250 26	#NBATCH	26	Ready	1	29.01.2010 15:54:23
758	KRUPP CW	#RW78FE	83	Ready	1	29.01.2010 15:52:04
757	KRUPP CW	#NBATCH	1	Ready	1	29.01.2010 15:52:04

The status bar at the bottom indicates 'Writable', 'Insert', and '2057 : 25'.

Just one click

One click you can see the last page of your compiler output



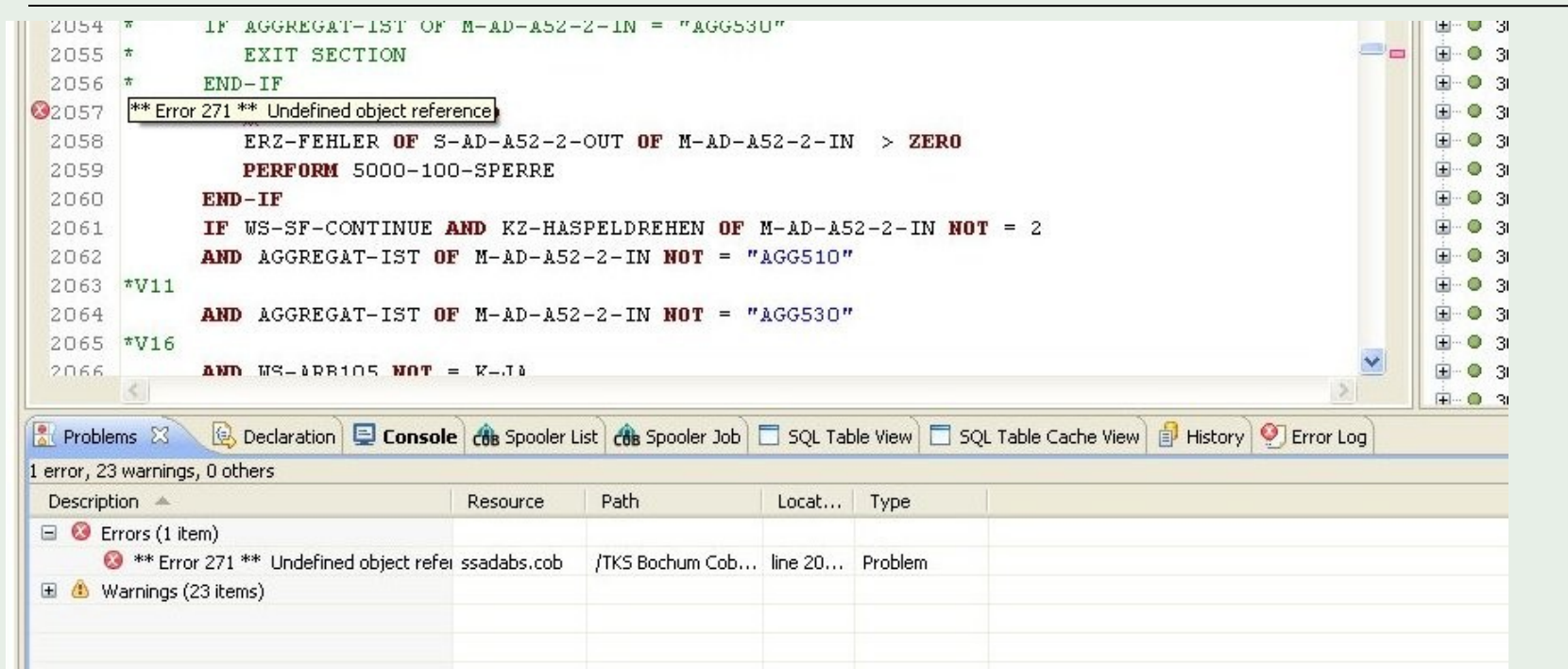
The screenshot shows a software interface with a toolbar at the top containing icons for Problems, Declaration, Console, Spooler List, Spooler Job, SQL Table View, SQL Table Cache View, History, and Error Log. The main area displays the following text:

```
PAGE 123 \SYS12.$DATA1.TEAD.SSADABS STATISTICS  
  
COBOL85 - T9257H01 - (15 MAR 09)  
No object file produced  
Number of compiler errors = 1  
Number of compiler warnings = 0  
Maximum symbol table size = 293444 bytes  
Last message on page 79  
Elapsed time - 00:05:18
```

3 options:

- Delete the job
- Show the complete list
- Only show the compilation errors and mark them in the editor

Just another click



```
2054 *      IF AGGREGAT-IST OF M-AD-A52-2-IN = "AGG530"
2055 *          EXIT SECTION
2056 *      END-IF
2057 ** Error 271 ** Undefined object reference
2058          ERZ-FEHLER OF S-AD-A52-2-OUT OF M-AD-A52-2-IN > ZERO
2059          PERFORM 5000-100-SPERRE
2060      END-IF
2061      IF WS-SF-CONTINUE AND KZ-HASPELDREHEN OF M-AD-A52-2-IN NOT = 2
2062      AND AGGREGAT-IST OF M-AD-A52-2-IN NOT = "AGG510"
2063 *V11
2064      AND AGGREGAT-IST OF M-AD-A52-2-IN NOT = "AGG530"
2065 *V16
2066      AND WS-ARR105 NOT = K-TA
```

1 error, 23 warnings, 0 others

Description	Resource	Path	Locat...	Type
Errors (1 item)				
✖ ** Error 271 ** Undefined object refer	ssadabs.cob	/TKS Bochum Cob...	line 20...	Problem
Warnings (23 items)				

The compilation errors are marked in the editor

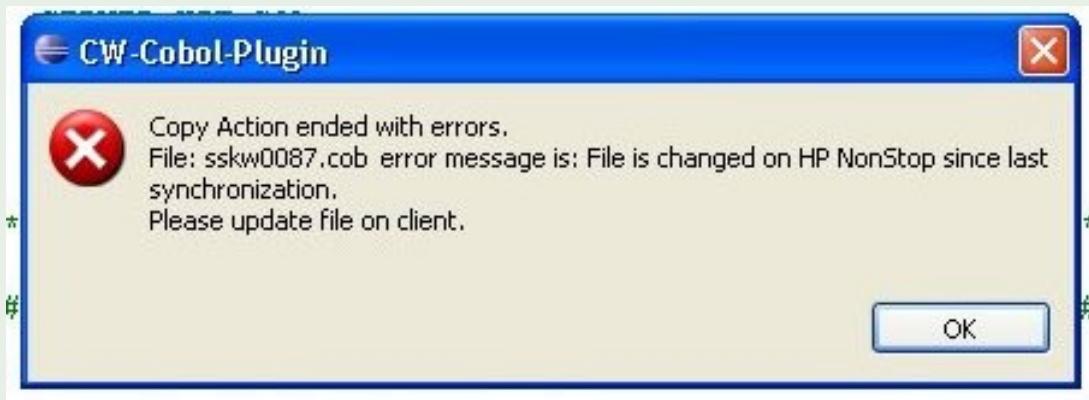
- Tooltip
- Sidebar

Protect Sources on the NonStop Server

Outdated sources are marked in the project view



Sources on the Server are protected against overwriting



SQL-generation

```
6766
6767 CONTINUE.
6768 ENDE.
6769 **-----
6770 EXIT.
6771
6772
6773 6525-READ-AGGSTA SECTION.
6774 **-----
6775 ANFG.
6776 **-----
6777 SET WS-SQL-OK TO TRUE
6778
6779
6780 CONTINUE.
6781 ENDE.
6782 **-----
6783 EXIT.
6784
6785
6786
6787
6788
6789 6532-PS-INFO-TELE SECTION.
6790 #####
6791 ##
6792 ## 6532-PS-INFO-TELE
6793 ## -----
6794 ##
6795 ## Bezeichnung : SENDEN MESSAGE AN SKSSFFE, dieser erzeugt
6796 ## Telegramm 6532 und leitet es weiter an F
6797 ##
6798 #####
6799 ANFG.
6800 **-----
6801 ## VO1 310801 PACHT Anfang
6802 *V19
6803 * IF KZ-SPERRUNG OF S-KW-KONTROLLEN-DATEN-FEHLER
6804 * OF NEU OF S-KW-87-IN (WS-IND) NOT = 2
6805 * GO TO ENDE
6806 * END-IF
6807 IF FEHLER-NR OF FEHLER-TAB OF ALT OF S-KW-87-IN (WS-IND) =
6808 FEHLER-NR OF FEHLER-TAB OF NEU OF S-KW-87-IN (WS-IND) AND
```

Sql Tool for generating Sql Statements

Table: =aggsta use cache

Hostvar: hv-aggsta

Progvar: ws-aggsta

Define Macro:

Select into MOVE Hostvar TO Progvar

Insert MOVE Progvar TO Hostvar

Update Show tableview only

Delete

OK Cancel

SQL-generation

```
6774 *-----
6775 ANFG.
6776 **-----
6777 SET US-SQL-OK TO TRUE
6778 EXEC SQL
6779 SELECT
6780     KZF_AGGREGAT_KLASSE
6781     ,AGGREGAT_BEZ_PC
6782     ,AGGREGAT_BEZ_BPR
6783     ,EMPFANGSRECHNER_FREGAT
6784     ,DATUM_DB_AEND
6785     ,ZEIT_DB_AEND
6786     ,TIMESTAMP_DB_AEND
6787     ,ZEITDAUER_STOERZEITUNTERDRUECK
6788     ,AGGREGAT_KURZBEZ
6789     ,AGGREGAT_BEZ_KONTENPLAN
6790     ,AGGREGAT_BEZ_PZ
6791 INTO
6792     :KZF-AGGREGAT-KLASSE           OF hv-aggsta
6793     ,:AGGREGAT-BEZ-PC             OF hv-aggsta
6794     ,:AGGREGAT-BEZ-BPR           OF hv-aggsta
6795     ,:EMPFANGSRECHNER-FREGAT     OF hv-aggsta
6796     ,:DATUM-DB-AEND              OF hv-aggsta
6797     ,:ZEIT-DB-AEND               OF hv-aggsta
6798     ,:TIMESTAMP-DB-AEND         OF hv-aggsta
6799     ,:ZEITDAUER-STOERZEITUNTERDRUECK OF hv-aggsta
6800     ,:AGGREGAT-KURZBEZ          OF hv-aggsta
6801     ,:AGGREGAT-BEZ-KONTENPLAN   OF hv-aggsta
6802     ,:AGGREGAT-BEZ-PZ           OF hv-aggsta
6803 FROM
6804     =aggsta
6805 WHERE
6806     AGGREGAT           = :AGGREGAT           OF hv-aggsta
6807 BROWSE ACCESS
6808 END-EXEC.
6809 MOVE AGGREGAT           OF hv-aggsta TO AGGREGAT           OF ws-aggsta
6810 MOVE KZF-AGGREGAT-KLASSE OF hv-aggsta TO KZF-AGGREGAT-KLASSE OF ws-aggsta
6811 MOVE AGGREGAT-BEZ-PC    OF hv-aggsta TO AGGREGAT-BEZ-PC    OF ws-aggsta
6812 MOVE AGGREGAT-BEZ-BPR  OF hv-aggsta TO AGGREGAT-BEZ-BPR  OF ws-aggsta
6813 MOVE EMPFANGSRECHNER-FREGAT OF hv-aggsta TO EMPFANGSRECHNER-FREGAT OF ws-aggsta
6814 MOVE DATUM-DB-AEND     OF hv-aggsta TO DATUM-DB-AEND     OF ws-aggsta
6815 MOVE ZEIT-DB-AEND      OF hv-aggsta TO ZEIT-DB-AEND      OF ws-aggsta
6816 MOVE TIMESTAMP-DB-AEND OF hv-aggsta TO TIMESTAMP-DB-AEND OF ws-aggsta
6817 MOVE ZEITDAUER-STOERZEITUNTERDRUECK OF hv-aggsta TO ZEITDAUER-STOERZEITUNTERDRUECK OF ws-aggsta
6818 MOVE AGGREGAT-KURZBEZ  OF hv-aggsta TO AGGREGAT-KURZBEZ  OF ws-aggsta
6819 MOVE AGGREGAT-BEZ-KONTENPLAN OF hv-aggsta TO AGGREGAT-BEZ-KONTENPLAN OF ws-aggsta
6820 MOVE AGGREGAT-BEZ-PZ   OF hv-aggsta TO AGGREGAT-BEZ-PZ   OF ws-aggsta
6821
6822
6823 CONTINUE.
6824 ENDE.
6825 *-----
6826 EXIT.
```

generated code

Commitwork Developer Suite

- All benefits from Eclipse included
- Integration into your existing development environment

Utilization of your existing compile macros
Spooler view

- Powerfull editors for Cobol (Cobol85 and Screen Cobol),
Tal (in preparation)

Showing the compile errors within the editors

- Generation of SQL statements

CommitWork

Questions?

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