

Operational Notes for FOCUS Version 7.1

FOCUS Area	System	Description
AUTOINDEX	CMS OS/390	IF/WHERE tests with RECORDLIMIT disable the AUTOINDEX feature.
	CMS OS/390	AUTOINDEX is now supported with External Index databases.
ALLOCATIONS	OS/390	FOCUS no longer performs a catalog search in order to dynamically allocate FOCUS files with 'prefix.mfd_name.focus'. This new behavior yields a FOC036 NO DATA FOUND FOR FILE error when the file is not allocated prior to TABLE, MATCH, and GRAPH commands. Data file allocations may also be placed in the Master File. Refer to the feature titled DATASET Attribute in a Master File.
ANALYSE	CMS OS/390	Large packed fields are not supported with the ANALYSE command.
	CMS OS/390	ANALYSE is now fully Y2K compliant when using Smart Dates. Legacy dates that include the century are not supported.
AUTOTABLEF	CMS OS/390	This feature, formerly available only with HiperFOCUS, is now available as part of 7.1 FOCUS. This improves performance by avoiding the creation of an internal matrix whenever FOCUS can automatically convert a TABLE request into a TABLEF request. The default is set ON.
BATCHECHO	CMS OS/390	BATCHECHO is a new FOCUS set command that prevents the echoing of your FOCEXEC in your SYSPRINT or SYSOUT files. SET BATCHECHO=OFF disables this behavior only printing the release header and report output.
COMPILE	CMS OS/390	FOCCOMPs created in Version 7.0 Release 8 may not be run in prior FOCUS releases. FOCCOMPs created in releases prior to 7.0.8 may be run in Version 7.1. FOCCOMPs are upwardly compatible between FOCUS releases, but not downwardly compatible.
COMPILE	OS/390	MODIFYs compiled for use with Static SQL in prior releases of FOCUS must be recompiled with the Interface STATIC setting ON or NOBIND in order to execute them in Version 7.1. If NOBIND is used, a new DB2 BIND must also be performed. Precompiled MODIFYs that update FOCUS databases, FOCCOMPs, need not be recompiled for Version 7.1.
Dates Year 2000	CMS OS/390	The file default century (FDFC) and year threshold (FYRT) settings will be taken from the host MFD when used in a JOIN.

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DB2 Interface	OS/390	New optimization logic for FST. and LST. operators may change report line sequences for applications that rely on key field sorts of the answer set. This may affect the first or last record returned. To invoke prior behavior issue the command, SET OPTIMIZATION FOCUS.
DB2 Interface and SQL/DS Interface	CMS OS/390	Static compile of MODIFY MATCH requests with the WITH-UNIQUES option is not supported.
Dialogue Manager	CMS OS/390	The variable &READS now represents the number of I/Os to satisfy a query against a file. Previously this value was equated to the number of records returned.
	CMS OS/390	Truncation of leading zeros in dialogue manager strings may be avoided by using the new SET command, SET LEADZERO=ON/OFF. OFF is the default setting which retains truncation of leading zeros.
	OS/390	-WRITE ddname in a Dialogue Manager loop requires a DYNAM CLOSE to the ddname before the changes are reflected in the data set that ddname is allocated to.
	CMS OS/390	&DATEfmt will display a slash between the year and day when JUL is the format. If any other format is used in conjunction with JUL, for example W, then a comma will display to separate the formats.
EDIT	CMS OS/390	When using the EDIT function to convert a long packed field to alphanumeric, spaces would incorrectly be appended to the front of the result field. This behavior has been resolved in this release.
Error Messages	CMS OS/390	The NON-NUMERIC DATA FOUND IN FILE error message now has a FOC36282 message number associated with it.
	CMS OS/390	The NO FILTERS IN EFFECT FOR FILE NAMED %1 error message now has a FOC36304 message number associated with it.

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External Sort	CMS OS/390	TABLE, MATCH, and GRAPH commands can now employ external sort utilities to sort large queries. If inadequate disk space is allocated for the SORTWORK data sets, a (FOC909) CRITICAL ERROR IN EXTERNAL SORT CODE:16 may occur. A new SET command, SET ESTRECORDS=n is available. This allows for a better estimation of SORTWORK space and may eliminate FOC909 CODE:16 errors.
	CMS	When using the CMS/SYNCSORT utility SET ESTRECORDS=n is ignored by SYNCSORT. Therefore, no estimation of sortwork areas is done.
	CMS OS/390	When creating a HOLD file from the external sort via the EXTHOLD feature SAVEMATRIX is set to OFF. The RETYPE command from the prompt yields a (FOC026) THE REPORT IS NO LONGER AVAILABLE message.
External Index	CMS OS/390	The prompts have changed for the ADD option when issuing a REBUILD EXTERNAL INDEX ADD command.
FOCUS CLIENT	CMS OS/390	Mainframe Focus can be configured as a client to EDA. It can communicate via LU6.2 and/or TCP/IP protocols. Documentation pertaining to this functionality can be found in the <i>Overview and Operating Environments</i> manual, Version 7.1.
FOCPARM ERRORS	CMS OS/390	This file is required for Version 7.1. It can be used to change any default FOCUS settings. It supports only the FOCUS SET command.
FOCSAM Interface	CMS OS/390	FOCSAM=OLD is no longer supported. If this command is entered a (FOC324) UNRECOGNIZED SET COMMAND error results.
FOCSAM Interface	CMS OS/390	The FOCSAM ERRORS file displays complete error text via query error number. Example, '? 1130'.
FUSION	CMS	Creating 10 or more MDI's in CMS FOCUS requires 12M of virtual storage.
GRAPH	CMS OS/390	The GRAPH command now supports new date formatted fields.
HOLD	CMS OS/390	HOLD FORMAT WP CC will save carriage control characters regardless of what PAGE is set to. HOLD FORMAT WP NOCC will not save carriage control characters regardless what PAGE is set to.
LE/OS/390 - Subroutines	OS/390	Subroutines compiled with the IBM Language Environment 370 compiler can't be called from a compiled MODIFY (FOCCOMP) in any release prior to R7.0.8.

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IUCV	CMS	<p>We now support the IUCV communications protocol for CMS SU. Performance benefits are realized with the IUCV protocol, as the master processor is no longer serially enqueued.</p> <p>IUCV requires an update to the SU machine's directory entry. Insert 'IUCV ALLOW' into the directory entry to enable the IUCV communication path. This command may only be inserted into the directory entry from a id which has DIRMAINT privileges. The SVC is not supported.</p>
IDMS/SQL	OS/390	<p>The new IDMS/SQL install guide is available with TM7927. This document replaces appendix D of the user guide.</p>
IDMS/SQL	OS/390	<p>Earlier releases of the Interface would not respect an IDMS isolation level other than the IDMS default of Read Write (RW). FOCUS Version 7.1 respects other user specified isolation levels such as Read Only.</p>
JOIN	CMS OS/390	<p>JOIN CLEAR will now clear all DEFINES associated with the files participating in the JOIN that was cleared.</p>
MASTER=NEW	CMS OS/390	<p>Fusion requires a new Master File syntax. This syntax is parsed internally with a new master file parser. This parser is OFF by default. For use with Fusion it must be activated with the set command, SET MASTER=NEW. The new master file parser has the following requirements:</p> <p>The keywords FILE, FILETYPE, ACCESSFILE, CLASSNAME, CLASSKEYS, FIELDNAME must be coded in this order to avoid (FOC1822) WARNING INVALID SYMBOL parsing errors. The old master file parser didn't enforce a specific order for parsing of these keywords.</p> <p>'FIELDNAME= ', 'ENCRYPT= ' and 'SEGNAME= ' syntax yields a (FOC1822) error with the new master file parser.</p> <p>ACTUAL, USAGE, FIELDTYPE, INDEX and FORMAT keywords may not be enclosed in single quotes, e.g.: 'ACTUAL=A10'. This will result in a (FOC1822) WARNING INVALID SYMBOL >FORMAT A10< error message.</p> <p>HELPMESSAGE 'THIS IS MY HELPMMSG' must have the text of the help message enclosed in single or double quotes to avoid a (FOC1822) parsing error.</p> <p>New master syntax does not support field renaming or DEFINE statements within static cross-referenced segments. This will result in a (FOC1822) parsing error.</p>

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MAINTAIN	CMS OS/390	<p>The new date functions DATEADD, DATEDIF, and DATEMOV may be used in MAINTAIN applications with an extra parameter: the result field.</p> <p>For example:</p> <p>In MAINTAIN, the application developer can code:</p> <p>Compute ADATE/YYMD = ... (some expression) Compute DUE_DATE/YYMD = DATEADD (ADATE, 'BD', 20, DUE_DATE);</p> <p>Compute NOTICE_DATE/YYMD = DATEMOV (DUE_DATE+1, 'EOM', NOTICE_DATE);</p> <p>Compute TOTAL_DAY/I4 = DATEDIF (ADATE,NOTICE_DATE,'BD',TOTAL_DAY);</p>
MODIFYTALK	CMS OS/390	MODIFYTALK is not currently supported for long fieldnames.
Multi-Verb Requests	CMS OS/390	In a multi-verb request, the use of OVER is only allowed for the last verb of the request.
National Language Support	CMS OS/390	The MODIFYTALK,FMMENU,SHELPROF utilities have not been translated for NLS support.
	CMS OS/390	The command 'SET LANG=lang' when used in conjunction with the Web Interface for FOCUS will display errors in the native language. It will also display .GIF buttons in that native language for French, Spanish, Swedish and German.
Oracle Interface	CMS OS/390	The default for the INSERTSIZE array blocking factor has been changed from 20 to 1 (no blocking). The default for the FETCHSIZE array blocking factor remains 20.
Performance	CMS	Users may expect to see an approximate 5%-7% gain in overall CMS FOCUS performance. This was made possible by changes to the way FOCUS manages memory usage.
RECTYPE	CMS OS/390	Creating a HOLD Master File from a request that PRINTs a RECTYPE field now writes FIELD=' RECTYPE' into the Master. We no longer perform an implied IF test on the RECTYPE fields ALIAS value when TABLEing the HOLD Master. FOCUS generates the ALIAS value Enn based on the position of the field within the request. This value won't match the data in the HOLD file. In the past this would yield reports with RECORDS and LINES count of 0.
Redefines/Interfaces	CMS OS/390	Redefined fields are supported for all relational interfaces, IMS, and IDMS interfaces only.
Relational Interfaces	CMS OS/390	The default value for the SQLJOIN OUTER parameter is OFF for DB2 and SQL/DS but on for the other relational interfaces.

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SET TEMP=disk	CMS	The default temporary disk set by FOCUS at initialization will not be a Shared File System (SFS) directory. This is done in order to prevent additional I/O associated with SFS.
Simultaneous Usage	OS/390	The FOCUS SVC is no longer supported. All sites must use the IBI Subsystem.
	OS/390	(FOC542) errors may occur when the client and server FOCLIB.LOAD datasets have different LINREC,DATREC sizes. Changing the default size of LINREC,DATREC is a post installation customization. Both should have the same values for LINREC,DATREC.
SmartMode	CMS OS/390	Usage Monitoring COLLECT Field
		<p>The following are descriptions for the values of the COLLECT field in SMCOLLCT (0-4) and their relation to ADVISE mode:</p> <p>0 - Indicates normal collection</p> <p>1 - Indicates the request was in ADVISE mode but SmartMode was unable to estimate the cost for the request (this was a new query; never seen; not enough information).</p> <p>2 - The actual value of the request exceeded the threshold set but a rule had never been induced to take this knowledge to advantage. Even if GOVERN mode was set on, the request would still not have been canceled. The administrator should re-induce rules for this database to acquire new rules leveraging this new query resource cost information.</p> <p>3 - XRETRIEVAL=ON was set by user.</p> <p>4 - The request would have been canceled had Govern mode been set on.</p>
SQL Translator	CMS OS/390	In order to use the SQL Translator with KANJI, you must SET LANG = JPE.
Static TABLE	OS/390	A DB2 TABLE with option INTERPRET will cause an abend. <code>SQL SQLDS COMPILE TABSTA21 -OPTION(INTERPRET)</code>
Subroutines	CMS OS/390	Subroutine calls in which all the parameters are constants will no longer result in a FOC062 error. In prior releases, if the last parameter of a subroutine call was the fieldname from the left side of a DEFINE or COMPUTE, a FOC062 was returned when it should not have been since all this parameter is used for is the output format for the subroutine.
TABLE	CMS OS/390	TABLE requests that contain the SUM verb and use an external sort enjoy performance gains in CPU time from 5%-15% due to aggregation optimization. These gains are achieved by passing aggregated records to an external sort avoiding the FOCUS merge process. The request must contain the SUM verb and ask for sorting (BY fld). Multi-verb requests are not optimized in this fashion.

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TABLE	CMS OS/390	Format conversion errors when reading a SUFFIX=FIX file now yield an error msg, (FOC1346) : FORMAT ERROR: Record n, Column n
TABLE	CMS OS/390	A new set command PRINTPLUS=ON/OFF is available. This command affects report output for both HOTSCREEN and OFFLINE printing. Differences may be seen in the following areas: A decrease in the number of report pages as blank lines are suppressed. SUMMARIZE and RECAP in the same request print both values and not just the RECAP value. SUBFOOT and FOOTING in the same request print the SUBFOOT text prior to the FOOTING text. SUBTOTAL and SUBFOOT in the same request now prints the SUBFOOT text prior to the SUBTOTAL value.
TABLE	CMS OS/390	Retrieval from a SUFFIX=FIX will build the logical record to be retrieved by using the sum of the ACTUALs coded in the MFD and compare it to the physical LRECL of the allocated file. In release 6.5.8 and earlier the physical LRECL of the allocated FIX file determined the length of the logical record to be retrieved. This change in V7.1 may affect how reports are displayed. Earlier releases would display a report that had extra characters per printed record in order to equal the length of the LRECL. Now truncation may occur based on the length of the ACTUALs coded in the Master File.
TABLE	CMS OS/390	FOC098 error message changed from "TOTAL LENGTH OF VERB OBJECTS EXCEEDS 4096 CHARACTERS" to "LIMIT FOR TOTAL LENGTH OF ALL VERB OBJECTS EXCEEDED"
TABLE	CMS OS/390	In a multi-verb request, use of OVER is only allowed for the last verb of the request.
TABLETALK	CMS OS/390	A new option has been added to TABLETALK, SAVE ON CLIENT.
USE	CMS OS/390	If an empty file or one otherwise unable to be read is in a USE directory for concatenation, this file will cause a FOC1960 error message to display and processing will continue with the next file specified in the USE.
USE	CMS OS/390	If a USE list contains a file that is inconsistent with the other files in the USE list, for example an empty file, then a FOC1960 will result.
Web Interface	OS/390	Web Interface uses the default ddname TEMPTAB to write HTML-formatted FOCUS reports. The default space allocation for this file is 5,5 TRACKS. On large reports, it is possible that this space will be insufficient resulting in a B37 abend. If this occurs, ddname TEMPTAB can be pre-allocated (e.g., in the

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Web390	OS/390	<p>FOCUS CLIST or via the DYNAM command) with more space.</p> <p>The HTML files used by Web Interface must have an LRECL=80 and RECFM=F. Please be certain to use these DCBs for all HTML files otherwise unexpected results may occur.</p>
	OS/390	<p>If you are running both WebFOCUS and Web Interface on the same WEB390 Server, the adhoc tools (Report Assist and Graph Wizard) can only be used for either Web Interface or WebFOCUS (not both). Using the ad hoc tools with BOTH products requires a dedicated WEB390 server for each product.</p> <p>Drill-down is not yet available for GRAPHS. This will be implemented in the next release.</p>