

ASF Groups and Fields

This chapter covers the following topics:

- Units of Measurement
- ASF Groups
- ASF Fields

Units of Measurement

The Adabas statistical data can be displayed in various units of measurement. The units available are listed in the following table. In the section ASF Fields it is listed which unit can be used for which field. The "API" column indicates the abbreviation to be used by the Application Programming Interface (API).

Unit	API	Meaning	Description
Bl	BL	Blocks	The size value is displayed in units of blocks.
Cy	CY	Cylinders	The size value is displayed in units of cylinders.
MB	MB	Megabytes	The size value is displayed in units of megabytes (millions of bytes).
By	BY	Bytes	The size value is displayed in units of bytes.
Se	SE	Seconds	The time value is displayed in total number of seconds.
Hr	HR	Hours	The time value is displayed as "hours:minutes:seconds".
Da	DA	Days	The time value is displayed as "days:hours:minutes".
%	PC	Percent	The value is displayed as percentage.
Nom	blank	Nominal value	The actual value of the field. This is also the default if no column is selected.
1/min	PM	Per Minute	The average number of occurrences per minute.
1/call	PM	Per Call	The average time spent per call. This unit is only available for the Call Duration fields.
MS	MS	msec	The time value is displayed in total number of milliseconds. This unit is only available for the Call Duration fields. It is used when the "Nom" or no unit has been selected.

ASF Groups

The statistical data which the ASF Store Program stores, are the values of the ASF data fields. The ASF data fields are subdivided into several groups: most of them are related to some aspect of the database, one group contains technical ASF fields (such as the store date), and one group is reserved for the user fields. The ASF groups are displayed when you use the active help function at the evaluation profile administration. In the evaluation itself only the field names are displayed.

Group	Group Name	Description
1	ADARUN-Parameter	Parameters specified with ADARUN.
2	Session Information	Nucleus session information (DBID, etc.)
3	Physical DB-Layout	Physical layout of the database (Associator, Data Storage).
4	IO-Data	I/O information.
5	Cmd distr. source	From where the calls are coming.
6	Cmd distr. thread	Number of calls per thread.
7	Cmd distr. type	Number of calls per type (like 'L9').
8	User calls	User related information.
9	Run time info	Run time information (like number of buffer flushes).
10	Call duration (milliseconds)	Duration of the different call types.
11	High water marks	Highest usage of various pools.
12	File description	File related information.
13	Tech. ASF fields	Technical ASF data (like store date/time).
14	User defined fields	Fields defined by the user in the ASF User-exit.

ASF Fields

Note:

If not mentioned otherwise, all cumulative values (like the number of commands) are accumulated since nucleus start.

- Group 1: ADARUN-Parameter
- Group 2: Session Information
- Group 3: Physical DB-Layout
- Group 4: IO-Data
- Group 5: Cmd distr. source
- Group 6: Cmd distr. thread
- Group 7: Cmd distr. type
- Group 8: User calls
- Group 9: Run time info
- Group 10: Call duration

- Group 11: High water marks
- Group 12: File description
- Group 13: Tech. ASF fields
- Group 14: User defined fields

Group 1: ADARUN-Parameter

ASF Field Name	ADAREP/Session-Protocol	Description
LBP	LBP	Length of Buffer Pool.
LFP	LFP	Length of Internal Format Pool.
LU	LU	Length of Intermediate User Buffer.
LWP	LWP	Length of Adabas Work Pool.
LP	LP	Length of Data Protection Area.
LS	LS	Length of Sort Area.
NAB	NAB	Number of Attached Buffers.
NC	NC	Number of Command Queue Elements.
NH	NH	Number of Hold Queue Elements.
NISNHQ	NISNHQ	Number of ISNs in Hold Queue per user.
NSISN		Number of ISNs per TBI Element.
NT	NT	Number of Threads.
NU		Number of User Queue Elements.
TT	TT	Transaction Time Limit.
TNAA	TNAA	Non-Activity Time Limit (Access Only Users).
TNAE	TNAE	Non-Activity Time Limit (ET Logic Users).
TNAX	TNAX	Non-Activity Time Limit (Exclusive Update Users).
DUALPLS	DUALPLS	Dual Protection Log Size (blocks).
DUALPLD	DUALPLD	Dual Protection Log Device.
DUALCLS	DUALCLS	Dual Command Log Size (blocks).
DUALCLD	DUALCLD	Dual Command Log Device.
OPENRQ	OPENRQ	Open Command Required.
PLOGRQ	PLOGRQ	Protection Log Required.
NQCID	NQCID	Number of Active CIDs per User.
IGNDIB	IGNDIB	Ignore DIB Entry.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
LBP	Bytes				By				
LFP	Bytes				By				
LU	Bytes				By				
LWP	Bytes				By				
LP	Blocks	Bl							
LS	Bytes				By				
NAB	Nominal						Nom		
NC	Nominal						Nom		
NH	Nominal						Nom		
NISNHQ	Nominal						Nom		
NSISN	Nominal						Nom		
NT	Nominal						Nom		
NU	Nominal						Nom		
TT	Seconds		Da	Hr	Se				
TNAA	Seconds		Da	Hr	Se				
TNAE	Seconds		Da	Hr	Se				
TNAX	Seconds		Da	Hr	Se				
DUALPLS	Blocks	Bl	Cy	MB					
DUALPLD	Nominal						Nom		
DUALCLS	Blocks	Bl	Cy	MB					
DUALCLD	Nominal						Nom		
OPENRQ	Nominal						Nom		
PLOGRQ	Nominal						Nom		
NQCID	Nominal						Nom		
IGNDIB	Nominal						Nom		

Group 2: Session Information

ASF Field Name	ADAREP/Session-Protocol	Description
DBID	DATA BASE NUMBER	Database ID (physical).
DB-NAME	DATA BASE NAME	Database Name.
SVC	SVC	Adabas SVC.
NUCID	NUCID	The Adabas nucleus Id used in a cluster environment. It is "0" for a non-cluster environment.
VERSION		Adabas Version / Release / SM level.
DATE LOADED	DATE LOADED	Date of First Database Load.
TIME LOADED	TIME LOADED	Time of First Database Load.
MAXNR OF FILES	MAXIMUM NUMBER OF FILES	Maximum Nr of Files allowed.
NR FILES LOADED	NUMBER OF FILES LOADED	Nr of Files currently loaded.
CURR. LOG TAPE	CURRENT LOG TAPE NUMBER	Nr of Current Logtape.
DURATION	DURATION	Elapsed time since nucleus start in seconds (value returned by the nucleus). The field is available for all evaluation types. It is used for the per-minute calculation.
WAIT-TIME	WAIT-TIME	Non-activity time of the nucleus in seconds.
CPU-TIME	CPU-TIME	CPU-TIME used by the nucleus in seconds.
DATE NUC-START	START-DATE	Date the Nucleus was started.
TIME NUC-START	START-TIME	Time the Nucleus was started.
NUC-RUN-TIME		Elapsed time since nucleus start until 'STORE-TIME' time stamp.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
DBID	Nominal						Nom		
DB-NAME	Nominal						Nom		
SVC	Nominal						Nom		
NUCID	Nominal						Nom		
VERSION	Nominal	Bl					Nom		Nom: <i>version.release.sm</i> Bl: <i>vvrss</i>
DATE LOADED	Nominal						Nom		
TIME LOADED	Nominal						Nom		
MAXNR OF FILES	Nominal						Nom		
NR FILES LOADED	Nominal						Nom		
CURR. LOG TAPE	Nominal						Nom		
DURATION	Seconds		Da	Hr	Se				
WAIT-TIME	Seconds		Da	Hr	Se	%			1000 * Percentage of DURATION.
CPU-TIME	Seconds		Da	Hr	Se	%			1000 * Percentage of DURATION.
DATE NUC-START	Nominal						Nom		
TIME NUC-START	Nominal						Nom		
NUC-RUN-TIME	Seconds		Da	Hr	Se				

Note:

The unit "Bl" for the *VERSION* field can be used in Critical Reports to perform queries depending on the Adabas version.

Group 3: Physical DB-Layout

ASF Field Name	ADAREP/Session-Protocol	Description
ASSO USED		Number of Units used for Associator.
ASSO DEFINED	PHYSICAL LAYOUT ASSO	Number of Units allocated for Associator.
ASSO UNUSED	UNUSED STORAGE ASSO	Number of free Units (ASSO DEFINED - ASSO USED).
ASSO EXTENTS		Number of Extents of Associator.
DATA USED		Number of Units used for Data Storage.
DATA DEFINED	PHYSICAL LAYOUT DATA	Number of Units allocated for Data Storage.
DATA UNUSED	UNUSED STORAGE DATA	Number of free Units (DATA DEFINED - DATA USED).
DATA EXTENTS		Number of Extents of Data Storage.
WORK DEFINED		Number of Units allocated for Work.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
ASSO USED	Blocks	Bl	Cy	MB		%			Percentage of ASSO DEFINED.
ASSO DEFINED	Blocks	Bl	Cy	MB					
ASSO UNUSED	Blocks	Bl	Cy	MB		%			Percentage of ASSO DEFINED.
ASSO EXTENTS	Nominal					%	Nom		Percentage: $100 * \text{EXTENTS} * \text{USED} / \text{DEFINED}$.
DATA USED	Blocks	Bl	Cy	MB		%			Percentage of DATA DEFINED.
DATA DEFINED	Blocks	Bl	Cy	MB					
DATA UNUSED	Blocks	Bl	Cy	MB		%			Percentage of DATA DEFINED.
DATA EXTENTS	Nominal					%	Nom		Percentage: $100 * \text{EXTENTS} * \text{USED} / \text{DEFINED}$.
WORK DEFINED	Blocks	Bl	Cy	MB					

Note:

See Note 1 in the File Description group for more information on the percentage value of Extent fields.

Group 4: IO-Data

ASF Field Name	ADAREP/Session-Protocol	Description
READ ASSO	READS ASSO	Number of Reads on Associator.
READ DATA	READS DATA	Number of Reads on Data Storage.
READ WORK	READS WORK	Number of Reads on Work.
WRITE ASSO	WRITES ASSO	Number of Writes on Associator.
WRITE DATA	WRITES DATA	Number of Writes on Data Storage.
WRITE WORK	WRITES WORK	Number of Writes on Work.
WRITE PLOG	WRITES PLOG	Number of Writes on Protection Log.
LOG. READS	LOG. READS	Number of Calls to Adabas Buffer
BUFF. EFFICIENCY	BUFFER EFF	Buffer Efficiency.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
READ ASSO	Nominal						Nom	1/min	
READ DATA	Nominal						Nom	1/min	
READ WORK	Nominal						Nom	1/min	
WRITE ASSO	Nominal						Nom	1/min	
WRITE DATA	Nominal						Nom	1/min	
WRITE WORK	Nominal						Nom	1/min	
WRITE PLOG	Nominal						Nom	1/min	
LOG. READS	Nominal			MB			Nom	1/min	Nom: values with more than 11 digits are displayed as floating point numbers. MB: million count (mega).
BUFF. EFFICIENCY	Nominal						Nom		

Group 5: Cmd distr. source

ASF Field Name	ADAREP/Session-Protocol	Description
REMOTE LOGICAL	REMOTE LOGICAL	Number of Calls via Network.
REMOTE PHYSICAL	REMOTE PHYSICAL	Number of Calls via Network by a utility (historical field).
LOCAL LOGICAL	LOCAL LOGICAL	Number of Calls.
LOCAL PHYSICAL	LOCAL PHYSICAL	Number of Calls by a utility (historical field).

Note:

Physical calls (REMOTE PHYSICAL and LOCAL PHYSICAL) are no longer counted by Adabas. ASF offers these fields only for historical reasons.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
REMOTE LOGICAL	Nominal						Nom	1/min	
REMOTE PHYSICAL	Nominal						Nom	1/min	
LOCAL LOGICAL	Nominal						Nom	1/min	
LOCAL PHYSICAL	Nominal						Nom	1/min	

Group 6: Cmd distr. thread

ASF Field Name	ADAREP/Session-Protocol	Description
NR THREADS USED		Number of threads used.
THREAD-001-CMDS	Command distribution by Thread	Number of Commands in Thread 1.
THREAD-002-CMDS	Command distribution by Thread	Number of Commands in Thread 2.
...
THREAD-250-CMDS	Command distribution by Thread	Number of Commands in Thread 250.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
NR THREADS USED	Nominal						Nom		
THREAD- <i>nnn</i> -CMDS	Nominal						Nom	1/min	

Group 7: Cmd distr. type

ASF Field Name	ADAREP/Session-Protocol	Description
CMD A1/4	A1/4	Number of Record Updates Commands.
CMD BT	BT	Number of Backout Transaction Commands.
CMD CL	CL	Number of Close User Session Commands.
CMD ET	ET	Number of End Transaction Commands.
CMD E1/4	E1/4	Number of Delete Records Commands.
CMD L1/4	L1/4	Number of Read Record Commands.
CMD L2/5	L2/5	Number of Read Physical Sequential Commands.
CMD L3/6	L3/6	Number of Read Logical Sequential Commands.
CMD L9	L9	Number of Read Descriptor Values Commands.
CMD LF	LF	Number of Read Field Definitions Commands.
CMD N1/2	N1/2	Number of Add Record Commands.
CMD OP	OP	Number of Open User Session Commands.
CMD UC		Number of Utility commands.
CMD RC	RC	Number of Release Command ID Commands.
CMD RE		Number of Read ET User Data Commands.
CMD S1/4	S1/4	Number of Find Records Commands.
CMD S2	S2	Number of Find Records with Sort Commands.
CMD S5	S5	Number of Find Coupled ISNs Commands.
CMD S8	S8	Number of Process ISN Lists Commands.
CMD S9	S9	Number of Sort ISN List Commands.
CMD REST	REST	Number of all commands not listed above.
NONE FILE CMDS		Number of commands not related to a file.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
CMD x	Nominal						Nom	1/min	

Group 8: User calls

ASF Field Name	ADAREP/Session-Protocol	Description
MOST CALLS	MOST CALLS	Number of Calls the Most Calls User issued.
MOST CALLS USER		User who issued the most Calls.
MOST IOS	MOST IOs	Number of I/Os the Most I/Os User issued.
MOST IOS USER		User who issued the most I/Os.
MOST CPU	MOST CPU	CPU needed by the Most CPU user in seconds.
MOST CPU USER		User who needed the most CPU.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
MOST CALLS	Nominal						Nom		
MOST CALLS USER	Nominal						Nom		
MOST IOS	Nominal						Nom		
MOST IOS USER	Nominal						Nom		
MOST CPU	Seconds		Da	Hr	Se	%			Percentage of CPU-TIME.
MOST CPU USER	Nominal						Nom		

Group 9: Run time info

ASF Field Name	ADAREP/Session-Protocol	Description
FORMAT TRANSL	FORMATS HAD TO BE TRANSLATED	Number of Format translations.
FORMAT OVERWR	FORMATS HAD TO BE OVERWRITTEN	Number of Format Overwrites.
AUTORESTARTS	AUTORESTARTS	Number of Autorestarts.
THROWBACK	COMMANDS HAD TO BE THROWN BACK	Number of Command Throwbacks (ISN-Throwbacks + Space-Throwbacks).
THREAD SWITCHES	THREAD SWITCHES	Number of Thread switches.
PLOG SWITCHES		Number of Protection Log Switches.
BUFFER FLUSHES	BUFFER FLUSHES	Number of Buffer Flushes.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
FORMAT TRANSL.	Nominal						Nom	1/min	
FORMAT OVERWR.	Nominal						Nom	1/min	
AUTORESTARTS	Nominal						Nom	1/min	
THROWBACK	Nominal						Nom	1/min	
THREAD SWITCHES	Nominal						Nom	1/min	
PLOG SWITCHES	Nominal						Nom	1/min	
BUFFER FLUSHES	Nominal						Nom	1/min	

Group 10: Call duration

ASF Field Name	ADAREP/Session-Protocol	Description
DUR-A1/4		Total duration of A1/A4 calls.
DUR-BT		Total duration of BT calls.
DUR-CL		Total duration of CL calls.
DUR-ET		Total duration of ET calls.
DUR-E1/4		Total duration of E1/E4 calls.
DUR-L1/4		Total duration of L1/L4 calls.
DUR-L2/5		Total duration of L2/L5 calls.
DUR-L3/6		Total duration of L3/L6 calls.
DUR-L9		Total duration of L9 calls.
DUR-LF		Total duration of LF calls.
DUR-N1/2		Total duration of N1/N2 calls.
DUR-OP		Total duration of OP calls.
DUR-UC		Total duration of UC calls.
DUR-RC		Total duration of RC calls.
DUR-RE		Total duration of RE calls.
DUR-S1/4		Total duration of S1/S4 calls.
DUR-S2		Total duration of S2 calls.
DUR-S5		Total duration of S5 calls.
DUR-S8		Total duration of S8 calls.
DUR-S9		Total duration of S9 calls.
DUR-REST		Total duration of rest of calls.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
DUR-x	msec		Da	Hr	Se		Nom	1/call	

Note:

The default duration values (nothing or Nom selected) reflect the total CPU time in milliseconds spent by the Adabas nucleus for the specified command type since nucleus start. When the "1/call" unit is selected, the average time spent by the nucleus for a single command is outlined:

$$1/call (DUR-x) = DUR-x / CMD-x$$

Group 11: High water marks

ASF Field Name	ADAREP/Session-Protocol	Description
AB-POOL	AB-POOL	Highest Usage of Attached Buffers during this session.
CQ-POOL	CQ-POOL	Highest Usage, Command Queue.
FO-POOL	FO-POOL	Highest Usage of Format Buffer during this session.
HQ-POOL	HQ-POOL	Highest Usage of Hold Queue during this Session.
TBI-POOL	TBI-POOL	Highest Usage of TBI-Pool (Administration of ISN on Work).
TBS-POOL	TBS-POOL	Highest Usage of TBS-Pool (Administration of seq. Read Sequences).
UQ-POOL	UQ-POOL	Highest Usage of User Queue during this Session.
WORK-POOL	WORK-POOL	Highest usage of Work-Pool during this Session.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
AB-POOL	Percent					%			Percentage of usage.
CQ-POOL	Percent					%			Percentage of usage.
FO-POOL	Percent					%			Percentage of usage.
HQ-POOL	Percent					%			Percentage of usage.
TBI-POOL	Percent					%			Percentage of usage.
TBS-POOL	Percent					%			Percentage of usage.
UQ-POOL	Percent					%			Percentage of usage.
WORK-POOL	Percent					%			Percentage of usage.

Group 12: File description

ASF Field Name	ADAREP/Session-Protocol	Description
FILE-ID		File name (physical).
FILE-NAME		File name.
NI USED		Number of Units used for Normal Index.
NI DEFINED	NI ALLOCATED	Number of Units allocated for Normal Index.
NI UNUSED	NI UNUSED	Number of free Units (NI allocated - NI used).
NI EXTENTS		Number of Extents of Normal Index.
UI USED		Number of Units used for Upper Index.

ASF Field Name	ADAREP/Session-Protocol	Description
UI DEFINED	UI ALLOCATED	Number of Units allocated for Upper Index.
UI UNUSED	UI UNUSED	Number of free units (UI allocated - UI used).
UI EXTENTS		Number of Extents of Upper Index.
DS USED		Number of Units used for File Data Storage.
DS DEFINED	DATA ALLOCATED	Number of Units allocated for File Data Storage.
DS UNUSED	DATA UNUSED	Number of free Units (DS defined - DS used).
DS EXTENTS		Number of Extents of File Data Storage.
AC DEFINED	AC ALLOCATED	Number of Units allocated for Address Converter.
AC EXTENTS		Number of extents allocated for Address Converter.
MIN ISN		Lowest ISN for the file.
MAX ISN	MAX-ISN EXPECTED	Maximum ISN expected.
TOP ISN	TOP-ISN	Highest ISN in this File.
AC2 DEFINED		Number of Units defined for secondary address converter.
AC2 EXTENTS		Number of extents allocated for secondary address converter.
AC2 MAX ISN		Maximum ISN expected for secondary address converter.
AC2 TOP ISN		Highest ISN used in the secondary address converter.
EXTENTS		Number of used file extents (AC, AC2, DS, NI and UI).
TOTAL EXTENTS		Total number of file extents which are at least available.
FREE EXTENTS		Number of free file extents which are at least available.
ISNSIZE		Indicates whether ISNs are 3 or 4 bytes long.
TOP ISN (3 BYTE)		The TOP ISN for files with ISNSIZE=3, "0" otherwise. See Note 3.
PADDING ASSO	PADDING FACTOR ASSO	Padding-Factor for Associator.
PADDING DATA	PADDING FACTOR DATA	Padding Factor for File Data Storage.
NR OF COMMANDS		Number of Commands issued to this file since nucleus start.

ASF Field Name	ADAREP/Session-Protocol	Description
NR OF UPDATES	NUMBER OF UPDATES	Total number of updates issued to this file since file loaded or refreshed.
HIGH INDEX		Highest Index Level.
MAX RECL	MAX COMP REC LEN	Maximum Record Length if defined.
NUM. RECS LOADED	RECORDS LOADED	Number of Records loaded in this File.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
FILE-ID	Nominal						Nom		
FILE-NAME	Nominal						Nom		
NI USED	Blocks	Bl	Cy	MB		%			Percentage of NI DEFINED.
NI DEFINED	Blocks	Bl	Cy	MB					
NI UNUSED	Blocks	Bl	Cy	MB		%			Percentage of NI DEFINED.
NI EXTENTS	Nominal					%	Nom		Percentage: $100 * \text{EXTENTS} * \text{USED} / \text{DEFINED}$.
UI USED	Blocks	Bl	Cy	MB		%			Percentage of UI DEFINED.
UI DEFINED	Blocks	Bl	Cy	MB					
UI UNUSED	Blocks	Bl	Cy	MB		%			Percentage of UI DEFINED.
UI EXTENTS	Nominal					%	Nom		Percentage: $100 * \text{EXTENTS} * \text{USED} / \text{DEFINED}$.
DS USED	Blocks	Bl	Cy	MB		%			Percentage of DS DEFINED.
DS DEFINED	Blocks	Bl	Cy	MB					
DS UNUSED	Blocks	Bl	Cy	MB		%			Percentage of DS DEFINED.
DS EXTENTS	Nominal					%	Nom		Percentage: $100 * \text{EXTENTS} * \text{USED} / \text{DEFINED}$.
AC DEFINED	Blocks	Bl	Cy	MB					
AC EXTENTS	Nominal					%	Nom		Percentage: $100 * \text{EXTENTS} * (\text{TOP} - \text{MIN} + 1) / (\text{MAX} - \text{MIN} + 1)$.
MIN ISN	Nominal						Nom		
MAX ISN	Nominal						Nom		
TOP ISN	Nominal					%	Nom		Percentage of ISN range ($\text{MAXISN} - \text{MINISN} + 1$).
AC2 DEFINED	Blocks	Bl	Cy	MB					

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
AC2 EXTENTS	Nominal					%	Nom		Percentage: 100 * EXTENTS * TOP / MAX.
AC2 MAX ISN	Nominal						Nom		
AC2 TOP ISN	Nominal					%	Nom		Percentage of used AC2 ISN range (AC2 MAXISN).
EXTENTS	Nominal					%	Nom		Percentage of TOTAL EXTENTS.
TOTAL EXTENTS	Nominal						Nom		
FREE EXTENTS	Nominal					%	Nom		Percentage of TOTAL EXTENTS.
ISNSIZE	Nominal						Nom		
TOP ISN (3 BYTE)	Nominal						Nom		See Note 3.
PADDING ASSO	Percent					%			Percentage of Associator block.
PADDING DATA	Percent					%			Percentage of Data Storage block.
NR OF COMMANDS	Nominal						Nom	1/min	
NR OF UPDATES	Nominal					%	Nom	1/min	Percentage of NR OF COMMANDS. See Note 2.
HIGH INDEX	Nominal						Nom		
MAX RECL	Bytes				By				
NUM. RECS LOADED	Nominal					%	Nom		Percentage of ISN range (MAXISN – MINISN + 1).

Note 1:

The percentage value of the extents gives a more sophisticated approach to monitor the space usage because it combines the number of allocated extents with the filling level. Each full extent (of average size) counts as 100%. A value of 250% means: three extents allocated, two of them full and one half-full. In a Critical Report such a percentage value can be used to submit a query like "4th extent nearly full".

Example:

4 EXTENTS, 800 blocks defined, 760 blocks used.

Percent (USED)	=	100 * 760 / 800	=	95%
Percent (EXTENTS)	=	100 * 4 * 760 / 800	=	380%

The value of 380% can be interpreted as 3 (average) extents full and the forth extent filled up to 80%.

Note 2:

The number of file updates is counted since the file has been loaded or refreshed. The percentage calculation uses the number of commands, and the per-minute uses the nucleus duration time. Both values are counted since the nucleus has been started and reflect another time interval than the number of updates. Therefore for the number of updates, the units "%" and "1/min" are in general meaningless. Nevertheless, these units can be used when Delta Values (User Function 1) are used. In this case all values reflect the time interval of the delta value, e.g. one day for a daily store.

Note 3:

The field "TOP ISN (3 BYTE)" can be used to search all files which use an ISNSIZE 3 and the Top ISN is closed to the highest 3-byte value.

Example:

A Critical Report lists all files which you should be upgraded to ISNSIZE 4:

```
TOP ISN (3 BYTE) GE 16000000
```

Group 13: Tech. ASF fields

ASF Field Name	ADAREP/Session-Protocol	Description
STORE DATE		Date when the ASF Information was stored.
STORE TIME		Time when the ASF Information was stored.
SYNC-DATE		Synchronized date filled by ASF utility.
SYNC-TIME		Synchronized time filled by ASF utility.
REAL-STORE-DATE		Original store date filled by ASF utility.
REAL-STORE-TIME		Original store time filled by ASF utility .
TREND-GEN-DATE		Date when the trend data was generated.
TREND-GEN-TIME		Time when the trend data was generated.
#COUNTER		Number of Records accumulated
#LINE		Shows a line
STORE TYPE		Store type specified with the store program, e.g. "DA" for a daily store.
RECORD TYPE		"NU" for nucleus records or "TR" for generated trend data.
STORE USER		ID of the user who stored the data.
CONDENSED FROM D		From-date of condensed data filled by ASF utility.
CONDENSED FROM T		From time of condensed data filled by ASF utility.
CONDENSED TO DAT		To-date of condensed data filled by ASF utility.
CONDENSED TO TIM		To-time of condensed data filled by ASF utility.

Available units

ASF Field Name	Default	Bl	Da	Cy	Hr	MB	Se	By	%	Nom	1/call	1/min	Remark
STORE-DATE	Nominal									Nom			
STORE-TIME	Nominal									Nom			
SYNC-DATE	Nominal									Nom			
SYNC-TIME	Nominal									Nom			
REAL-STORE-DATE	Nominal									Nom			
REAL-STORE-TIME	Nominal									Nom			
GENERATING DATE	Nominal									Nom			
GENERATING TIME	Nominal									Nom			
#COUNTER	Nominal									Nom			
#LINE	Nominal									Nom			
STORE TYPE	Nominal									Nom			
RECORD TYPE	Nominal									Nom			
STORE USER	Nominal									Nom			
CONDENSED FROM D	Nominal									Nom			
CONDENSED FROM T	Nominal									Nom			
CONDENSED TO DAT	Nominal									Nom			
CONDENSED TO TIM	Nominal									Nom			

Group 14: User defined fields

The names of the user fields are defined in the Natural subprogram ASFUEXNA, which can be modified by the user. For more information, see the section User Fields in the *ASF User's Guide*. By default, the user fields are named as follows.

ASF Field Name	ADAREP/Session-Protocol	Description
USER-FIELD-A (01)		Alphanumeric user-field.
...		Alphanumeric user-fields.
USER-FIELD-A (10)		Alphanumeric user-field.
USER-FIELD-P (01)		Packed user-field.
...		Packed user-fields.
USER-FIELD-P (10)		Packed user-field.

Available units

ASF Field Name	Default	Bl	Da Cy	Hr MB	Se By	%	Nom	1/call 1/min	Remark
USER-FIELD-A (<i>nn</i>)	Nominal						Nom		
USER-FIELD-P(<i>nn</i>)	Nominal						Nom		