

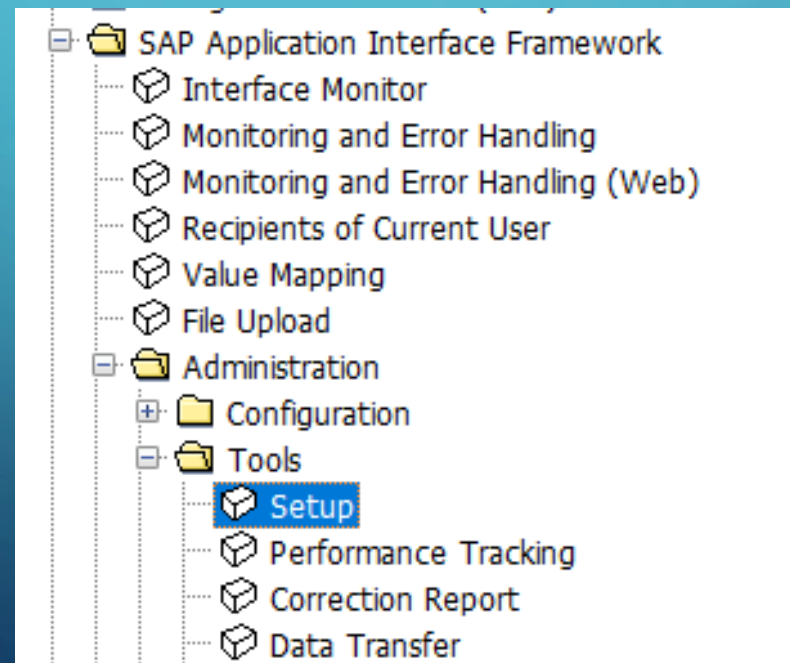


AIF (APPLICATION PROGRAMMING INTERFACE)

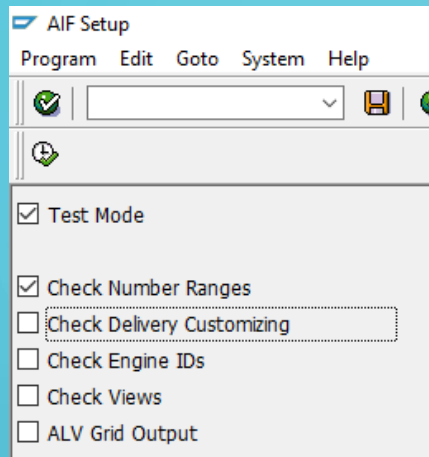
MY TRAINING PROJECTS BY AIF TUTORIALS FROM
SAPCODES.COM([HTTPS://SAPCODES.COM/AIF-APPLICATION-PROGRAMMING-
INTERFACE/](https://sapcodes.com/aif-application-programming-interface/))

1. AIF Set Up

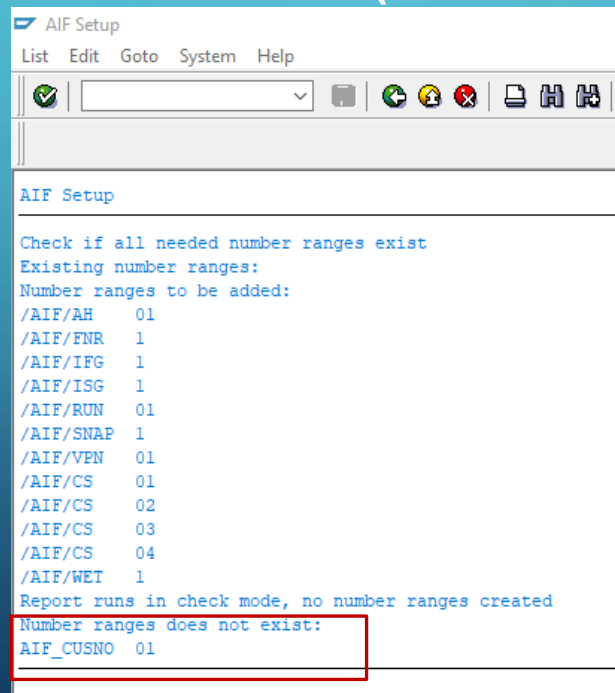
SAP AIF PROVIDES TRANSACTION TX- /AIF/SETUP TO CHECK AND CREATE REQUIRED NUMBER RANGES AND OTHER THINGS. BEFORE DOING ANY PROCESSING IN AIF, THIS MUST BE CHECKED AND CREATED FIRST. FROM THE ARE MENU /AIF/ , SELECT TX- /AIF/SETUP



THE PROGRAM CAN BE RUN IN TEST MODE/REAL MODE TO CHECK NUMBER OF THINGS. IN THIS POST WILL CHECK THE AIF NUMBER RANGES. SELECT THE TEST MODE AND SELECT CHECK NUMBER RANGES AND EXECUTE.



The program result shows all the number ranges already created in the system and if not created for few, then this program can be run (without test mode) to create the number ranges in the system.



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85 WRITE: 'Check if all needed number ranges exist'(001).NEW-LINE.
86
87 SELECT * INTO TABLE lt_existing_nriv FROM nriv WHERE object LIKE '/AIF%' or object LIKE 'AIF_%'.
88
89 WRITE: 'Existing number ranges:(003). NEW-LINE.
90 LOOP AT lt_existing_nriv ASSIGNING <ls_nriv>.
91     WRITE: <ls_nriv>-object, <ls_nriv>-nrrangenr. NEW-LINE.
92 ENDLOOP.
93
94 * build table with all needed number ranges
95 CLEAR: ls_nriv.
96 ls_nriv-object = '/AIF/AH'.    ls_nriv-nrrangenr = '01'.    ls_nriv-fromnumber = '000001'.    ls_nriv-tonumber = '999999'.    APPEND ls_nriv TO lt_new_nriv.
97 ls_nriv-object = '/AIF/FNR'.    ls_nriv-nrrangenr = '1'.    ls_nriv-fromnumber = '000001'.    ls_nriv-tonumber = '999999'.    APPEND ls_nriv TO lt_new_nriv.
98 ls_nriv-object = '/AIF/IFG'.    ls_nriv-nrrangenr = '1'.    ls_nriv-fromnumber = '00001'.    ls_nriv-tonumber = '99999'.    APPEND ls_nriv TO lt_new_nriv.
99 ls_nriv-object = '/AIF/ISG'.    ls_nriv-nrrangenr = '1'.    ls_nriv-fromnumber = '00000001'.    ls_nriv-tonumber = '99999999'.    APPEND ls_nriv TO lt_new_nriv.
100 ls_nriv-object = '/AIF/RUN'.    ls_nriv-nrrangenr = '01'.    ls_nriv-fromnumber = '0000000001'.    ls_nriv-tonumber = '9999999998'.    APPEND ls_nriv TO lt_new_nriv.
101 ls_nriv-object = '/AIF/ SNAP'.    ls_nriv-nrrangenr = '1'.    ls_nriv-fromnumber = '00000001'.    ls_nriv-tonumber = '99999999'.    APPEND ls_nriv TO lt_new_nriv.
102 ls_nriv-object = '/AIF/VPN'.    ls_nriv-nrrangenr = '01'.    ls_nriv-fromnumber = '0000000001'.    ls_nriv-tonumber = '9999999999'.    APPEND ls_nriv TO lt_new_nriv.
103 ls_nriv-object = '/AIF/CS'.    ls_nriv-nrrangenr = '01'.    ls_nriv-fromnumber = '00000001'.    ls_nriv-tonumber = '29999999'.    APPEND ls_nriv TO lt_new_nriv.
104 ls_nriv-object = '/AIF/CS'.    ls_nriv-nrrangenr = '02'.    ls_nriv-fromnumber = '30000000'.    ls_nriv-tonumber = '59999999'.    APPEND ls_nriv TO lt_new_nriv.
105 ls_nriv-object = '/AIF/CS'.    ls_nriv-nrrangenr = '03'.    ls_nriv-fromnumber = '60000000'.    ls_nriv-tonumber = '69999999'.    APPEND ls_nriv TO lt_new_nriv.
106 ls_nriv-object = '/AIF/CS'.    ls_nriv-nrrangenr = '04'.    ls_nriv-fromnumber = '70000000'.    ls_nriv-tonumber = '79999999'.    APPEND ls_nriv TO lt_new_nriv.
107 ls_nriv-object = '/AIF/WET'.    ls_nriv-nrrangenr = '1'.    ls_nriv-fromnumber = '00000001'.    ls_nriv-tonumber = '99999999'.    APPEND ls_nriv TO lt_new_nriv.
108 ls_nriv-object = 'AIF_CUSNO'.    ls_nriv-nrrangenr = '01'.    ls_nriv-fromnumber = '00000001'.    ls_nriv-tonumber = '02000000'.    APPEND ls_nriv TO lt_new_nriv.
109
110 * check which number ranges are already there
111 CLEAR: lv_need_update.
112 LOOP AT lt_new_nriv ASSIGNING <ls_nriv>.
113     READ TABLE lt_existing_nriv TRANSPORTING NO FIELDS WITH KEY object = <ls_nriv>-object.
114     IF sy-subrc <> 0.
115         * check if the number range exists. Only if the number range exists the interval has to be set
116         SELECT SINGLE * FROM tnr INTO ls_tnr WHERE object = <ls_nriv>-object.
117         IF sy-subrc = 0.
118             IF lv_need_update IS INITIAL.
119                 lv_need_update = 'X'.
120                 WRITE: 'Number ranges to be added:(004). NEW-LINE.
121             ENDIF.
122             WRITE: <ls_nriv>-object, <ls_nriv>-nrrangenr. NEW-LINE.
123         ELSE.
124             lv_need_update = 'X'.
125             APPEND <ls_nriv> TO lt_no_existing_nriv.
126             DELETE lt_new_nriv.
127         ENDIF.
128     ELSE.
129         DELETE lt_new_nriv.
130     ENDIF.
131 ENDLOOP.
132

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Data Browser: Table NRIV Select Entries 12

Table Entry Edit Goto Settings System Help

Check Table...

	CLIE...	OBJECT	SUBOBJE...	NRRANGE...	TOYE...	FROMNUMB...	TONUMBER	NRLEVEL	EXTERNI...	
	100	/AIF/AH		01		000001	999999	00000000000000000000		EXTERNIND
	100	/AIF/CS		01		00000001	29999999	00000000000000000000		
	100	/AIF/CS		02		30000000	59999999	00000000000000000000		
	100	/AIF/CS		03		60000000	69999999	00000000000000000000		
	100	/AIF/CS		04		70000000	79999999	00000000000000000000		
	100	/AIF/FNR		1		000001	999999	00000000000000000000		
	100	/AIF/IFG		1		00001	99999	00000000000000000000		
	100	/AIF/ISG		1		00000001	99999999	00000000000000000000		
	100	/AIF/RUN		01		0000000001	9999999998	00000000000000000000		
	100	/AIF/SNAP		1		00000001	99999999	00000000000000000000		
	100	/AIF/VPN		01		0000000001	9999999999	00000000000000000000		
	100	/AIF/WET		1		00000001	99999999	00000000000000000000		

```

132
133 IF lv_need_update IS INITIAL.
134     WRITE: 'All needed number ranges exist already'(005). NEW-LINE.
135     ULINE.
136     RETURN.
137 ENDIF.
138
139 IF NOT ip_test IS INITIAL.
140     WRITE: 'Report runs in check mode, no number ranges created'(006). NEW-LINE.
141 ELSE.
142     IF lt_new_nriv IS NOT INITIAL.
143         INSERT nriv FROM TABLE lt_new_nriv.
144         IF sy-subrc = 0.
145             CALL FUNCTION 'DB_COMMIT'.
146             WRITE: 'Report runs in save mode, number ranges were created'(007). NEW-LINE.
147         ELSE.
148             WRITE: 'Report runs in save mode, but number ranges were NOT created!'(008). NEW-LINE.
149         ENDIF.
150     ENDIF.
151 ENDIF.
152 IF lt_no_existing_nriv IS NOT INITIAL.
153     WRITE: 'Number ranges does not exist:'(028). NEW-LINE.
154     LOOP AT lt_no_existing_nriv ASSIGNING <ls_nriv>.
155         WRITE: <ls_nriv>-object, <ls_nriv>-nrrangenr. NEW-LINE.
156     ENDLOOP.
157 ENDIF.
158 ULINE.
159
160 ENDFORM.

```

"f check number ranges

The report details: it really creates number ranges which not yet created in the system except of ranges that don't exist in the table TNRO.

2. AIF INTRO & PROCESSING FIRST MESSAGE IN AIF

THE SAP APPLICATION INTERFACE FRAMEWORK (AIF) ENABLES TO DEVELOP AND MONITOR INTERFACES AS WELL AS EXECUTE ERROR HANDLING IN A SINGLE FRAMEWORK .

IT IS MOSTLY USEFUL IN A COMPLEX HETEROGENEOUS SYSTEM LANDSCAPE WITH SAP PI SYSTEM. BUSINESS USER(NOT TECHNICAL USER) CAN PERFORM ERROR MONITORING AND THE ERROR HANDLING.

AIF IS MOSTLY USEFUL WHEN DATA TRANSFER HAPPENS BETWEEN DIFFERENT SAP SYSTEMS.

