

ISO/IEC JTC1/SC2/WG2 N 2322

Date: 2001-02-05

TITLE: Proposal to add "Arabic Tail Fragment" character
SOURCE: IBM Egypt and the Unicode Consortium
ACTION: For review and acceptance by WG2
DISTRIBUTION: Members of JTC1/SC2/WG2

ISO/IEC JTC 1/SC 2/WG 2 PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646

Please fill Sections A, B and C below. Section D will be filled by SC 2/WG 2.

For instructions and guidance for filling in the form please see the document " Principles and Procedures for Allocation of New Characters and Scripts"
(<http://www.dkuug.dk/JTC1/SC2/WG2/prot>)

A. Administrative

1. Title: **Arabic character tail for final Seen family (Seen, Sheen, Saad, Daad)**
 2. Requester's name: **IBM Egypt**
 3. Requester type (Member body/Liaison/Individual contribution): **Individual Contribution**
 4. Submission date: **02/05/2001**
 5. Requester's reference (if applicable):
 6. (Choose one of the following:)
This is a complete proposal: ; or,
More information will be provided later:
This is a complete proposal
-

B. Technical - General

1. (Choose one of the following:)

a. This proposal is for a new script (set of characters): **No**

Proposed name of script:

b. The proposal is for addition of character(s) to an existing block: **Yes**

Name of the existing block: **Arabic presentation form B**

2. Number of characters in proposal: **1 (One)**

3. Proposed category (see section II, Character Categories): **B.1**

4. Proposed Level of Implementation (see clause 15, ISO/IEC 10646-1): **1**

Is a rationale provided for the choice? **The proposed character is like similar compatibility characters in the Arabic script.**

If Yes, reference:

5. Is a repertoire including character names provided?: **Yes. The proposal is to add the following to the block - Arabic Presentation Form B:**



FE73 ARABIC TAIL FRAGMENT

with the property of an Extender associated with it.

a. If YES, are the names in accordance with the 'character naming guidelines' in Annex K of ISO/IEC 10646-1? **Yes**

b. Are the character shapes attached in a reviewable form? **Yes (see above)**

6. Who will provide the appropriate computerized font (ordered preference: True Type, PostScript or 96x96 bit-mapped format) for publishing the standard? **IBM Egypt**

If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: **IBM-1046 font is available if needed.**

7. References:

a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

This character is used by other codepages like IBM-420, IBM-1046 and IBM-864

b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached? **No. If needed, Host-printed document, we can send a sample by fax.**

8. Special encoding issues:

Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information):
Facilitate the data interchange between Unicode and legacy applications and data stores, that use in particular the IBM-420 EBCDIC codepage and run on EBCDIC hosts such as AS400 and OS390.

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before?

No

If YES explain

2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

Yes.

If YES, with whom?

The Unicode Technical Committee

Note: The character name proposed herein is as a result of discussion at the meeting 86 of the UTC. Also, at its meeting 86, the UTC has accepted this character for inclusion in the Unicode standard at FE73.

The Arabic community representative in IBM.

Unicode community in IBM Cupertino.

If YES, available relevant documents?

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

Reference:

All the Arabic speaking countries, using IBM Arabic implementation.

4. The context of use for the proposed characters (type of use; common or rare)

Reference: Common.

5. Are the proposed characters in current use by the user community?

If YES, where? Reference:

Yes, on all the Host legacy applications and data stores running on the EBCDIC platforms such as S390 and AS400.

6. After giving due considerations to the principles in N 1352 must the proposed characters be entirely in the BMP? Yes

If YES, is a rationale provided? Yes

If YES, reference: It needs to be available in the UCS range within the Arabic presentation forms-B characters block, for Arabic data interchange and property- compatibility with existing data.

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? N/A

8. Can any of the proposed characters be considered a presentation form of an existing

character or character sequence? **No; It may be generated by an automatic shaping program using appropriate fonts, for presentation purposes only.**

If YES, is a rationale for its inclusion provided?

If YES, reference:

Required for data interchange of legacy data encoded in IBM EBCDIC Arabic CP-420.

9. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? **No**

If YES, is a rationale for its inclusion provided?

If YES, reference:

10. Does the proposal include use of combining characters and/or use of composite sequences (see clause 4.11 and 4.13 in ISO/IEC 10646-1)? **No**

If YES, is a rationale for such use provided?

If YES, reference:

Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

If YES, reference:

11. Does the proposal contain characters with any special properties such as control function or similar semantics?

If YES, describe in detail (include attachment if necessary) **No**

It is a compatibility character, used only for preserving one to one mappings with legacy IBM Arabic code pages.

D. SC 2/WG 2 Administrative (To be completed by SC 2/WG 2)

1. Relevant SC 2/WG 2 document numbers:

2. Status (list of meeting number and corresponding action or disposition):

3. Additional contact to user communities, liaison organizations etc:

4. Assigned category and assigned priority/time frame:

HEX DIGITS 1ST → 2ND ↓	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	(SP) SP010000	& SM030000	- SP100000	ح AH450003	ش AS230000	ظ AZ450000	غ AG310003	ك AK010003	؛ SP140007	؟ SP150007	× SA070000	0 ND100000
-1	(RSP) SP300000	أ AA310002	/ SP120000	خ AH470000	a LA010000	j LJ010000	÷ SA060000	ل AL010000	A LA020000	J LJ020000	(NSP) SP310000	1 ND010000
-2	س AX100000	ؤ AW310000	ة AT020000	ذ AH470003	b LB010000	k LK010000	s LS010000	لآ AL220000	B LB020000	K LK020000	S LS020000	2 ND020000
-3	س AX100004		ت AT010000	د AD010000	c LC010000	l LL010000	t LT010000	لآ AL220003	C LC020000	L LL020000	T LT020000	3 ND030000
-4	ـ SM860000		ت AT010003	ذ AD470000	d LD010000	m LM010000	u LU010000	لآ AL320000	D LD020000	M LM020000	U LU020000	4 ND040000
-5	ع SM870000	ئ AY310000	ث AT470000	ر AR010000	e LE010000	n LN010000	v LV010000	لآ AL320003	E LE020000	N LN020000	V LV020000	5 ND050000
-6	ء AX300000	ا AA010000	ث AT470003	ز AZ010000	f LF010000	o LO010000	w LW010000		F LF020000	O LO020000	W LW020000	6 ND060000
-7	آ AA210000	ا AA010002	ج AG230000	س AS010000	g LG010000	p LP010000	x LX010000		G LG020000	P LP020000	X LX020000	7 ND070000
-8	آ AA210002	ب AB010000	ج AG230003	س AS010003	h LH010000	q LQ010000	y LY010000	لآ AL020000	H LH020000	Q LQ020000	Y LY020000	8 ND080000
-9	أ AA310000	ب AB010003	ح AH450000	، SP080007	i LI010000	r LR010000	z LZ010000	لآ AL020003	I LI020000	R LR020000	Z LZ020000	9 ND090000
-A	¢ SC040000	! SP020000	! SM650000	: SP130000	ش AS230003	ع AC470000	غ AG310004	ل AL010003	(SHY) SP320000	ى AA020000	ا ND010001	€ SC200000
-B	. SP110000	\$ SC030000	, SP080000	# SM010000	ص AS450000	ح AC470002	فا AF010000	م AM010000	ه AH010003	ى AA020002	٢ ND020001	٦ ND060001
-C	< SA030000	* SM040007	% SM020007	@ SM050000	ص AS450003	ع AC470003	ف AF010003	م AM010003		ي AY010000		٧ ND070001
-D	(SP060000	) SP070000	_ SP090000	، SP050000	ض AD450000	ع AC470004	ق AQ010000	ن AN010000	ف AH010004	ي AY010002	٣ ND030001	٨ ND080001
-E	+ SA010000	; SP140000	> SA050000	= SA040000	ض AD450003	ع AG310000	ق AQ010003	ن AN010003		ي AY010003	٤ ND040001	٩ ND090001
-F	| SM130000	⌋ SM660000	? SP150000	" SP040000	ط AT450000	غ AG310002	ك AK010000	ه AH010000	و AW010000	. ND100001	٥ ND050001	(EO)

HEX DIGITS 1ST → 2ND ↓	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0			(SP) SP010000	0 ND100000	@ SM050000	P LP020000	` SD130000	p LP010000	ل AA310402	م AU050004	(RSP) SP300000	• ND100001	ع AC470003	ذ AD470000	ـ SM860000	ر AI050000
-1			! SP020000	1 ND010000	A LA020000	Q LQ020000	a LA010000	q LQ010000	× SA070000	ـ AI050004	آ AA210006	ا ND010001	ء AX300000	ر AR010000	ف AF010000	س AX100000
-2			" SP040000	2 ND020000	B LB020000	R LR020000	b LB010000	r LR010000	÷ SA060000	ع AX100004	أ AA310006	٢ ND020001	آ AA210000	ز AZ010000	ق AQ010000	• AE050000
-3			# SM010000	3 ND030000	C LC020000	S LS020000	c LC010000	s LS010000	س AS010000	ه AE050004	ل AA310406	٣ ND030001	أ AA310000	س AS010006	ك AK010000	ق AQ010003
-4			\$ SC030000	4 ND040000	D LD020000	T LT020000	d LD010000	t LT010000	ش AS230000	ـ AA050004	آ SC010000	٤ ND040001	ؤ AW310000	ش AS230006	ل AL010000	ك AK010003
-5			% SM020007	5 ND050000	E LE020000	U LU020000	e LE010000	u LU010000	ص AS450000	ع AY310002	ل AA010006	٥ ND050001	ا AA310400	ص AS450006	م AM010000	ل AL010003
-6			& SM030000	6 ND060000	F LF020000	V LV020000	f LF010000	v LV010000	ض AD450000	ي AA020002	ك AY310000	٦ ND060001	ي AY310006	ض AD450006	ن AN010000	، SM870000
-7			' SP050000	7 ND070000	G LG020000	W LW020000	g LG010000	w LW010000	ك AA070004	ي AY010003	ب AB010003	٧ ND070001	ا AA010000	ط AT450000	ه AH010003	لا AL220000
-8			(SP060000	8 ND080000	H LH020000	X LX020000	h LH010000	x LX010000		ي AY010002	ت AT010003	٨ ND080001	ب AB010000	ظ AZ450000	و AW010000	لا AL320000
-9			) SP070000	9 ND090000	I LI020000	Y LY020000	i LI010000	y LY010000	■ SM470000	غ AG310002	ث AT470003	٩ ND090001	ة AT020000	ع AC470000	ي AA020000	لا AL320400
-A			* SM040007	: SP130000	J LJ020000	Z LZ020000	j LJ010000	z LZ010000	⌋ SF110000	غ AG310003	ج AG230003	ش AS230003	ت AT010000	غ AG310000	ي AY010000	لا AL020000
-B			+ SA010000	; SP140000	K LK020000	[SM060000	k LK010000	{ SM110000	⌋ SF100000	غ AG310004	ح AH450003	: SP140007	ث AT470000	ح AC470004	• AA070000	م AM010003
-C			, SP080000	< SA030000	L LL020000	\ SM070000	l LL010000	| SM130000	⌋ SF030000	لا AL220003	، SP080007	ص AS450003	ج AG230000	آ AA210002	ه AU070000	ن AN010003
-D			- SP100000	= SA040000	M LM020000	] SM080000	m LM010000	} SM140000	⌋ SF010000	لا AL320003	(SHY) SP320000	ض AD450003	ح AH450000	أ AA310002	ء AI070000	ف AH010004
-E			. SP110000	> SA050000	N LN020000	^ SD150000	n LN010000	~ SD190000	⌋ SF020000	لا AL320402	خ AH470003	ح AC470002	خ AH470000	ا AA010002	ر AA050000	ه AH010000
-F			/ SP120000	? SP150000	O LO020000	_ SP090000	o LO010000		⌋ SF040000	لا AL020003	س AS010003	? SP150007	د AD010000	ف AF010003	ء AU050000	€ SC200000

HEX DIGITS	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
1ST →	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
2ND ↓	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0		▶	(SP)	0	@	P	`	p	°	β	(RSP)	•	φ	ذ	—	س
		SM590000	SP010000	ND100000	SM050000	LP020000	SD130000	LP010000	SM190000	GB010000	SP300000	ND100001	SC040000	AD470000	SM860000	AX100004
-1	☺	◀	!	1	A	Q	a	q	•	∞	(SHY)	ا	ء	ر	ف	س
	SS000000	SM630000	SP020000	ND010000	LA020000	LQ020000	LA010000	LQ010000	SD630000	SA450000	SP320000	ND010001	AX300000	AR010000	AF010003	AX100000
-2	♪	↕	"	2	B	R	b	r	•	φ	آ	٢	آ	ز	ق	ن
	SM930000	SM760000	SP040000	ND020000	LB020000	LR020000	LB010000	LR010000	SA790000	GF010001	AA210002	ND020001	AA210000	AZ010000	AQ010003	AN010000
-3	♪	!!	#	3	C	S	c	s	✓	±	£	٣	أ	س	ك	ه
	SM910000	SP330000	SM010000	ND030000	LC020000	LS020000	LC010000	LS010000	SA800000	SA020000	SC020000	ND030001	AA310000	AS010003	AK010003	AH010000
-4	☀	¶	\$	4	D	T	d	t	☐	½	⊗	٤	ؤ	ش	ل	ف
	SM690000	SM250000	SC030000	ND040000	LD020000	LT020000	LD010000	LT010000	SF150000	NF010000	SC010000	ND040001	AW310000	AS230003	AL010003	AH010004
-5	☐	§	%	5	E	U	e	u	☐	¼	ل	٥	ع	ص	م	س
	SF430000	SM240000	SM020007	ND050000	LE020000	LU020000	LE010000	LU010000	SF100000	NF040000	AA310002	ND050001	AC470002	AS450003	AM010003	AA020002
-6	☐	■	&	6	F	V	f	v	☐	≈		٦	ك	ض	ن	ي
	SF240000	SM700000	SM030000	ND060000	LF020000	LV020000	LF010000	LV010000	SF110000	SA700000		ND060001	AY310000	AD450003	AN010003	AY010002
-7	☐	↕	•	7	G	W	g	w	☐	«	€	٧	ا	ط	ه	غ
	SF440000	SM770000	SP050000	ND070000	LG020000	LW020000	LG010000	LW010000	SF050000	SP170000	SC200000	ND070001	AA010000	AT450000	AH010003	AG310004
-8	☐	↑	(	8	H	X	h	x	☐	»	ا	٨	ب	ظ	و	ق
	SF230000	SM320000	SP060000	ND080000	LH020000	LX020000	LH010000	LX010000	SF090000	SP180000	AA010002	ND080001	AB010003	AZ450000	AW010000	AQ010000
-9	☐	↓	)	9	I	Y	i	y	☐	لا	ب	٩	ة	ء	ى	لا
	SF410000	SM330000	SP070000	ND090000	LI020000	LY020000	LI010000	LY010000	SF060000	AL320000	AB010000	ND090001	AT020000	AC470003	AA020000	AL220000
-A	☐	→	*	:	J	Z	j	z	☐	لا	ت	ف	ت	غ	ي	لا
	SF420000	SM310000	SM040007	SP130000	LJ020000	LZ020000	LJ010000	LZ010000	SF080000	AL320003	AT010000	AF010000	AT010003	AG310003	AY010003	AL220003
-B	☐	←	+	;	K	[	k	{	☐		ث	:	ث	ا	ض	ل
	SF400000	SM300000	SA010000	SP140000	LK020000	SM060000	LK010000	SM110000	SF070000		AT470000	SP140007	AT470003	SM650000	AD450000	AL010000
-C	☐	⌒	,	<	L	\	l	|	☐		،	س	ج	ر	ع	ك
	SF250000	SA420000	SP080000	SA030000	LL020000	SM070000	LL010000	SM130000	SF030000		SP080007	AS010000	AG230003	SM660000	AC470004	AK010000
-D	☐	↔	-	=	M	]	m	}	☐	لا	ج	ش	ح	÷	غ	ي
	SF390000	SM780000	SP100000	SA040000	LM020000	SM080000	LM010000	SM140000	SF010000	AL020000	AG230000	AS230000	AH450003	SA060000	AG310002	AY010000
-E	☐	▲	.	>	N	^	n	~	☐	لا	ح	ص	خ	×	ع	■
	SF380000	SM600000	SP110000	SA050000	LN020000	SD150000	LN010000	SD190000	SF020000	AL020003	AH450000	AS450000	AH470003	SA070000	AG310000	SM470000
-F	☐	▼	/	?	O	_	o	☐	☐	،	ح	?	د	ع	م	
	SF260000	SV040000	SP120000	SP150000	LO020000	SP090000	LO010000	SM790000	SF040000	SM870000	AH470000	SP150007	AD010000	AC470000	AM010000	