Preparing for May 1, 2019: Japan's New Era Name

IUC42 Panel Discussion

What We Do Know

Japan's Emperor Akihito announced that he will abdicate the throne on 2019-04-30

— 2019-04-30 will therefore be the last date of the Heisei era

Japan's new era starts on 2019-05-01

The new era name will consist of exactly two kanji that are easy to read and write

— Per Japan's Era Name Law (1979)

The UTC (Unicode) and WG2 (ISO/IEC 10646) already reserved a code point: U+32FF

— This is for the two-kanji square ligature form of the era name

— Unicode Version 1.1 (1993) included U+337B 平成, U+337C 昭和, U+337D 大正 & U+337E 明治

Unicode is preparing to issue Version 12.1 shortly after the announcement of the name

— Too late for inclusion in Version 12.0 (2019-03-05); Version 12.1 will add only this single character

— Unicode Version 6.2 also added only one character: U+20BA ₺ TURKISH LIRA SIGN

What We Do Not Know… …Yet

The name of the new era

— 2019-02-24 is the 30th anniversary of the enthronement

— The announcement will happen no sooner than 2019-02-25, but as late as 2019-05-01

— 2019-05-01 takes place during Japan's Golden Week holiday, and also during UTC #159

The character name, decomposition, and representative glyph for U+32FF

The extent to which social media will play a role in the demand for U+32FF support

Prepare for the worst… …hope for the best

Japan's Era Names: Past, Present & Future

Japanese Era	Gregorian Calendar	Japanese Calendar
Meiji	1868-10-23 through 1912-07-29	明治元年 through 明治 45 年
Taishō	1912-07-30 through 1926-12-24	大正元年 through 大正 15 年
Shōwa	1926-12-25 through 1989-01-07	昭和元年 through 昭和 64 年
Heisei	1989-01-08 through 2019-04-30	平成元年 through 平成 31 年
<New Era>	2019-05-01 and beyond	<New Era>元年 and beyond

Work That Has Been Done

Unicode Version 12.1 planning

Adobe published the Adobe-Japan1-7 CMap resources

— Only the code point and CIDs (*Character IDs*) were necessary

— Enables the development of test/prototype fonts

— The Adobe-Japan1-7 Character Collection specification will be published shortly after the announcement

Adobe published the Adobe-Japan1-7 ToUnicode mapping file: "Adobe-Japan1-UCS2"

— Likewise, only the code point and CIDs were necessary

— Enables search and Copy&Paste in Adobe Acrobat and other PDF consumers

Work That Needs To Be Done

Unicode Version 12.1 release

— A solid plan is in place

CLDR update

— Calendar-related issues unrelated to U+32FF

— New era in calculations, two-character name, and special formatting for the first year

ICU update

— Incorporates CLDR changes, and supports properties of U+32FF (for use in algorithms)

Key fonts need to be updated

— OS-bundled fonts obviously have the highest priority

— Key Japanese type foundries are already aware of what actions Adobe has taken thus far

Thorough testing to reveal implementation issues and dependencies

Discussion Points & Challenges

Date Calculations

— 2019 will refer to two eras

— Discuss relaxed parsing

Date Formatting

— 元年 (*gannen*) is used for the first year of an era, such as 平成元年 for the first year of the Heisei era

CLDR and ICU updates are therefore key priorities

Update key fonts

— Support for U+32FF is needed for publishing and other environments

Supporting the new era name as two separate kanji is the highest priority

Supporting the new era name as U+32FF may be a high priority for some sectors

Resources

Unicode Blog

— New Japanese Era

.NET Blog

— Handling a new era in the Japanese calendar in .NET

Shawn Steele's Blog

— Testing for New Japanese Era

— The Japanese Calendar's Y2K Moment

— Using the Registry to Test the New Japanese Era on Windows

— Japanese Era Ligature Abbreviations

CJK Type Blog

— Adobe-Japan1-6 Is Expecting!

— Preparing for May 1, 2019—2019年 5 月 1 日の準備

— Adobe-Japan1-7 Subset Fonts

— About Adobe-Japan1-7 Font Names

http://bit.ly/IUC42S3T3