

Release Management Group Report to UTC #180

July 17, 2024

Peter Constable & UTC Release Management Group

The Release Management Group (“RMG”) is composed of UTC working group leaders and other volunteers working on the process for development of the Unicode 16.0 release and for evolving processes for future Unicode Standard releases.

Unicode 16.0 timeline

A timeline for the development and release of Unicode 16.0 was proposed in [L2/23-264](#) and confirmed by UTC #177 (cf. [177-C1](#)). The following is a summary of key dates:

- 2024-4-25, UTC #179: Finalize beta content
- 2024-5-21: start of beta review
- 2024-7-2: end of beta review
- 2024-7-25, UTC #180: Finalize 16.0 content
- 2024-9-10: Unicode 16.0 release

Unicode 16.0 beta and release

The 16.0 beta review period began and completed as scheduled, and working groups have reviewed feedback and provided recommendations for UTC to consider in preparing for the 16.0 release. Once all feedback has been considered by UTC and technical decisions have been made, RMG recommends that UTC take the following actions:

[180-C] Consensus: The UTC authorizes the release of Unicode 16.0 and synchronized standards UTS #10, UTS #39, UTS #46 and UTS #51, incorporating the results of decisions and actions as recorded during UTC #180, with a target release date of September 10, 2024.

[180-A] Action item for Ken Whistler, PAG: Prepare an updated NamesList.txt for Unicode Version 16.0, synched with the final Unicode Version 16.0 repertoire, as finalized during UTC #180.

[180-A] Action item for Ken Whistler, PAG: Prepare final candidate data files for the UCD, and the data directories for UTS #10, UTS #39, and UTS #46, for the Unicode Version 16.0 release.

[180-A] Action item for Ned Holbrook, ESC: Prepare final candidate data files for the data directory of UTS #51, and a complete set of emoji final charts for Emoji 16.0.

[180-A] Action item for Peter Constable, RMG: Complete all tasks associated with the 16.0 release.

[180-A] Action item for Rick McGowan, UTC: Close PRIs ## 483 – 507.

UTC actions to authorize proposed updates for UAXes and synchronized UTSeS

In preparing for UTC #180, questions arose within some working groups as to when UTC should record a decision to authorize a proposed update of a UAX—in particular, should it be necessary to authorize a proposed update when there will be changes to data files but not to the text of a UAX. RMG considered this question and recommends the following:

- UTC should always record a decision authorizing a proposed update whenever there will be substantive changes to the text of a UAX or a synchronized UTS (10, 39, 46, 51). Authorization of a PRI for that proposed update should be considered implicit and not require a separate UTC action.
- When only a data file associated with a UAX or synchronized UTS is to be changed, it should not be necessary to authorize a proposed update of the UAX/UTS, but the fact that the data file has changes (and, optionally, more details) should be called out in the release notes or PRI cover page for the alpha and beta releases.

Note that minor maintenance updates for a new Unicode version are already excluded from requiring a UTC decision or PRI. See the following consensus:

[\[104-C16\]](#) Consensus: If no changes other than minor maintenance are required for a UAX at the point that UTC authorizes a release, the Editorial Committee is authorized to update that UAX without a proposed update or public review issue.

In today's context, RMG suggests that this decision be interpreted to authorize the Editorial Working Group, the working group responsible for the UAX (CJK, PAG, SEW) or RMG to implement the maintenance update.

Cross-posting of documents between registries

Besides UTC's document registry, Unicode also maintains registries for ISO/IEC JTC1/SC2/WG2 and for IRG, and many documents in those registries are relevant to UTC work. In the earlier years, documents were not always publicly available or widely distributed online.

But today, these registries are readily accessible and, as they are maintained by Unicode, we can be confident that documents in these registries will remain accessible.

This raises a question as to when or whether it is necessary to resubmit a document from the WG2 or IRG registries into UTC's document registry. There may be various pros and cons to cross-posting; for instance:

- On the one hand posting a WG2 doc in the UTC register improves discoverability.
- On the other hand, cross-posting results in duplication and greater maintenance burden if there are revisions of docs.

Whether or when to cross-post deserves discussion within UTC.

In preliminary discussion within RMG, our suggestion is that UTC should allow reference to WG2 and IRG documents that are relevant as background information to UTC decisions. It is unclear to us whether there are clear cases in which cross-posting into the UTC register should be required.

Acknowledgements

RMG reminds leaders of other working groups to record acknowledgements for significant contributions to Unicode 16.0, and requests that this be done by August 16.

A question was raised as to whether every individual that submits feedback and whose feedback is incorporated into the Standard should be listed in the acknowledgements. The general consensus within RMG is that it is not necessary to acknowledge every accepted feedback, but only significant contributions. If, for example, a feedback item leads to a significant technical change, or a beta review provides several items of feedback with corrections to several issues in data files or charts, these can warrant acknowledgement. Working group leaders can use their own discretion in deciding what contributions are sufficiently significant to deserve acknowledgement.

Besides the compilation of acknowledgements, two of the tasks to be completed for each release are to update [The Unicode Standard Acknowledgements page](#) and the [Font Contributors Acknowledgements page](#). Going forward, the Charts group will take responsibility for updating the font contributors page. RMG will be considering further how best to maintain the Unicode Standard acknowledgements.

Categorization and distribution of feedback

RMG notes that there are ongoing process issues with the categorization and distribution of public feedback, both for open PRIs and for general technical feedback from the public. In the past, Rick McGowan intercepted all incoming feedback; and for the technical feedback, either

pushed it to a corresponding PRI feedback page for later UTC review or handed it off to whoever seemed the most likely to drive a decision or start whatever discussion was needed.

More recently, we have moved to a more distributed model, where all technical public feedback is (manually) categorized by an appropriate owning group and is tagged accordingly as it is posted to the relevant specific PRI feedback page or to a general other-feedback page for the UTC. The owning groups (PAG, SEW, CJK, EDC, ESC, etc.) are then responsible for scanning for feedback tagged for them, so they can process it appropriately. This often means moving it into that owning group's issue tracker for further triage and discussion, and then eventually coming back around to address the feedback with specific recommendations to the UTC in that owning group's quarterly report to the UTC.

This new model has proven to have some growing pains, particularly during busy times for incoming feedback, such as during the beta review for a new Unicode version. There has to be a premium for quick and accurate categorization and hand-off of feedback to the correct owning group(s), so that consideration and responses are not unduly delayed simply due to feedback being misrouted or delayed in tagging. The problem has the potential to get worse next year, because whoever takes over this initial routing responsibility for feedback may not have the benefit of accumulated years of experience in quick evaluation of the scope of the wide variety of public feedback the UTC receives on various topics.

RMG advises that it would be good practice to develop a more explicit set of guidelines for how to do this routing of public feedback, including some steps for double-checking that all incoming items *do* get correctly categorized and that owning group chairs get notification as items tagged for them enter the queue.

As Michelle Perham takes over from Rick in processing PRIs and PRI feedback, she won't have Rick's many years of familiarity with our working groups and topic areas. It will be highly beneficial for one or more volunteers to step forward for mentoring and over-the-shoulder participation in this kind of feedback routing during the next few UTC cycles.

Process development

As mentioned in [RMG's report to UTC #175](#), RMG has used issues in RMG's GitHub repo to track status of character additions and glyph changes. As reported in [RMG's report to UTC #178](#), this process mechanism has since been refined to using a GitHub project dashboard in which RMG can track progress on various components needed for a release—charts, data files, etc.

RMG has been using this mechanism to track progress for all new scripts and characters and for glyph changes or new CJK horizontal extensions. Recently, RMG also began to track the addition of formal name aliases.

Formal name aliases, which are normative, are listed in the NameAliases.txt UCD file. As part of the UCD, that file is part of the alpha and beta review process. However, people interested in the character names are more likely going to look at code charts to see character names or to look for formal name aliases. If a block already has a character addition or glyph change, then delta charts will be produced for the alpha and beta reviews. But up to now, delta charts have not been produced if the only technical change in a block is the addition of a name alias. For Unicode 16.0, formal name aliases were added for Bamum and Mende-Kikakui characters, but delta charts were not produced for the alpha or beta. This also has downstream impact for ISO/IEC 10646: the alias additions for Bamum and Mende-Kikakui characters are normative changes in Amendment 2, but the CDAM2 and DAM2 documents do not reflect these in any way. These are significant technical changes that should not be missed during technical reviews.