Forth Standards Committee
Hotel mein Inselglück, Insel Reichenau, Germany
7–9 September 2016

Minutes

1 Participants

WB Willem Botha CCS, South Africa
AE M. Anton Ertl Technische Universität Wien, Austria
AH Andrew Haley Red Hat, Cambridge, England
UH Ulrich Hoffmann FH Wedel, Germany
PK Peter Knaggs Trowbridge, England (Editor)
BP Bernd Paysan Net2o, Germany (Treasure)
SP Stephen Pelc MPE, England (Chair)
LW Leon Wagner FORTH, Inc., USA (Technical)
GW Gerald Wodni Wien, Austria
SB Sergey Baranov Russian Academy of Sciences, Russia

- Sergey Baranov has become a full member of the committee.
- Andrew Haley was invited to join the committee (6/0/0).
- Simon Kaphahn is deemed to have resigned from the committee.

2 Minutes of last meeting

The minutes of the last meeting where approved electronically on 30/Jan/2016.

As the minutes should always be approved electronically, this item should be removed from the agenda (7/0/0).

Action: SP

3 Review of procedures

The proposed constitution was discussed and revised. The revised proposal, attached to these minutes, was accepted (10/0/0).

As required by the new constitution, a secret ballot was held to fill the officer positions:

Chair: Stephen Pelc (6) Anton Ertl (4)
Editor: Peter Knaggs (10)
Technical: Gerald Wodni (10)
Treasure: Bernd Paysan (10)

All offices are for a period of four years. I.e., officers must stand down or stand for re-election in 2020.

4 Publication of Forth-2012 document

A subcommittee (consisting of Leon Wagner, Bernd Paysan, Willem Botha and Peter Knaggs) was tasked to investigate this, reporting back at the next standards meeting.

Action: LW/BP/WB/PK
5  Review of *Forth 2016.1* basis document

a) `x:2-complement` — Remove alternative arithmetic models
   i) 3.2.1.1 insert hyphen “two’s-complement”
   ii) 3.2.2.2 remove “s” from “divisions”
   iii) 3.2.2.2 remove “in these cases” from the end of the first paragraph
   iv) 3.2.2.2 insert “for operations other than division” into the second item
   v) 3.2.2.2 replace the first “2” with “-2”
   vi) A.3.2.1 remove last paragraph
   vii) A.3.2.1 remove “likely” from new paragraph
   viii) A.3.2.1 make definition of $n$ a clause of the preceding sentence
   ix) A.3.2.2.2 Remove entry
   x) A.5.2.2 Correct “entitle” to “entitled”
   xi) A.5.2.2 Replace “lower” with “lowest”
   xii) A.8.6.1.1140 Correct “twos-complement” to “two’s complement”
   xiii) E.8.6.1.1140 Correct $S>D$ to $D>S$

b) `edi16` — Changes to Foreword, Membership list, typo in FATAW2 and reference to EBCDIC.

(8/0/0)

c) `x:membership` — Changes to membership rules

(8/0/0)

Action: PK

6  Consideration of wording changes (RfCs)

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Comments</th>
<th>Vote</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset document</td>
<td>Minor revision of changes to foreword</td>
<td>10/0/0</td>
<td>PK</td>
</tr>
<tr>
<td></td>
<td>Revised to remove section 3.2.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7  Consideration of proposals (CfVs)

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Comments</th>
<th>Vote</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 chars = 1</td>
<td>Require an address unit to be wide enough to store one, and only one, character.</td>
<td>9/1/0</td>
<td>PK</td>
</tr>
<tr>
<td>quotations</td>
<td>Further evidence of existing practice required</td>
<td>6/1/3</td>
<td>AE</td>
</tr>
<tr>
<td>D&gt;S and S&gt;D</td>
<td>Remove ambiguity from definitions</td>
<td>10/0/0</td>
<td>PK</td>
</tr>
</tbody>
</table>

8  Consideration of *draft* proposals (RfDs)

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Comments</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>recognizers</td>
<td>Separate user stack operations out of proposal</td>
<td>Ongoing</td>
<td>AE/BP</td>
</tr>
<tr>
<td>memory access</td>
<td>A subcommittee was tasked with reviewing this proposal to report in 3 months</td>
<td>Ongoing</td>
<td>SP/LW/BP</td>
</tr>
<tr>
<td>double syntax</td>
<td>Proposal revised</td>
<td>Ongoing</td>
<td>AE</td>
</tr>
<tr>
<td>rename DU&lt;</td>
<td>There is no UD prefix in use. If a suite of UD words where proposed this may be considered</td>
<td>Contact</td>
<td>AE</td>
</tr>
</tbody>
</table>

The following drafts where posted on the [www.forth-standard.org](http://www.forth-standard.org) web site and on neither of the two recognised discussion forums.

<table>
<thead>
<tr>
<th>Proposal</th>
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<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>wlscope</td>
<td>Temporally switch definition wordlist</td>
<td>BP</td>
</tr>
<tr>
<td>Going forward</td>
<td>There are many ways of achieving this and standardising on one would not be helpful</td>
<td>AE</td>
</tr>
</tbody>
</table>


9 Progress Reports

a) Single XT  no progress  AE/Bp/SP
b) Floating point input  no progress, dropped  —
c) Sockets  little progress, ongoing  GW
d) Multitasking  subcommittee to develop RfD, report in 3 months  AH/GW
e) Internationalisation  subcommittee to develop RfD, report in 3 months  WB/SP/PK
f) Cross compiler  No requirement, dropped  —
g) IEEE 754  IEEE standard has become too complex, dropped  —
h) Memory access  See section 8  —

10 Matters Arising

Libraries and Packages
GW updated the committee on the development of the theForth.net package repository.
Additional comments and guidance was given for further development of the repository
Action: GW

Experimental Proposals
For some RfDs, we want to encourage the community to implement them in systems experimentally, and use them in programs to encourage feedback and common practice; the proposal is still subject to change, but the perspective is that something in that vein is intended to be standardized in the future. (10/0/0)
Action: GW

Proposal Process
In light of the two wiki based proposals, the proposal process was discussed. A revision was discussed where the proposals will be held on the wiki, with notification of new and revised proposals will be sent to the comp.lang.forth usenet group and the forth200x mail list.
Discussion should take place on the email list (and possibly on the wiki) and discussion on the email list. A subcommittee was tasked with developing a new proposal process to report in 3 months.
Action: GW/PK

Extension Queries
The reset document proposal was altered to remove the extension query. However, It was felt that some form of query mechanism was still required. A subcommittee was tasked with developing a replacement to report in 3 months
Action: SP/UH

Ambiguous Conditions
Most of the ambiguous conditions listed in section 4.1.2 describe error conditions. Over the years, there have been several proposals intended to remove ambiguous conditions. The committee would like to encourage such proposals.
Action: SP/All

11 Any Other Business

Directories
The problem of the current working directory when including a file was discussed. There does not appear to be any common practice within Forth or the wider programming community.
A subcommittee was tasked with developing an RfD to access the Posix directory handling functions, to report in 9 months.
Action: GW/UH

Case insensitivity
This has always been left to system implementations, but does cause significant confusion to new users. A suggestion to make the standard system case insensitive for the ascii letters (a-z/A-Z) was discussed.
Action: AE
C-Interface

Some time was spent looking at the various native operating system calling mechanisms. Although some common ground can be found there appears to be a significant differences when processing of strings.

Forth-2012

Two typos where identified in the published document. These should be corrected:

1. x:FATAN2 (0E to -0E in 12.6.2.1489).
2. ed16: systms to systems in A.5.1 Forth-2012 systms

Action: PK

12 Date of Next Meeting

The next standards meeting will be held immediately before the next euroForth conference being held in Bad Vöslau, Austria.
Annex: Constitution

1. Name
1.1. The name of the organisation shall be “Forth Standards Committee”.

2. Aims
2.1. Discussion and debate on the future direction of the Forth Standard;
2.2. Encouraging the submission of change proposals for the Forth Standard;
2.3. Publication of a continually developing Forth Standard;
2.4. Periodic publication of a snapshot of the developing Forth Standard.

3. Powers
3.1. Determine activities, eg: arrange seminars, conferences, working parties, commission reports, etc., consistent with the aims;
3.2. Raise funds to pay for its activities;
3.3. Determine expenses to be paid from its funds and to arrange their payment;
3.4. Take such other action as may benefit the committee.

4. Membership
4.1. Membership shall be invited from individuals who are interested in the development of the Forth programming language as demonstrated by attending at least two consecutive standards meetings;
4.2. Any member who misses two consecutive standards meetings will be considered to have resigned from the committee;
4.3. The committee reserves the right to reject or discontinue membership of individuals whose memberships is considered to be incompatible with the aims of the committee, by a two-thirds vote of current members;
4.4. A membership fee may be levied as deemed appropriate from time to time by a General Meeting;
4.5. The committee may invite distinguished members of the Forth community to join the committee at its discretion.

5. General Meetings
5.1. An Annual General Meeting shall be held;
5.2. A Special General Meeting may be called at any time at the request of an officer or if the one quarter of the members makes a request of the Chair that a meeting be called;
5.3. The Chair shall notify members of the time and place of each General Meeting at least one month prior to the date of the meeting, with a list of items to be discussed;
5.4. If the Chair fails to call a Special General Meeting within two months of a request to do so, members may notify the officers who must ensure that the meeting is arranged;
5.5. The quorum for a General Meeting shall be 50% of the membership;
5.6. The Chair must ensure minutes are taken and distributed for all Meetings;
5.7. General Meetings, with the exception of the Annual General Meeting, may be virtual (e.g., via Telephone, eMail, chat, etc.).
6. **Standards Meeting**

6.1. A standards meeting must be held at least once a year;

6.2. The meeting is responsible for:

   (a) Reviewing change proposals;

   (b) Reviewing changes to the Standard document;

   (c) Giving direction to the Editor on changes to be made to the Standard document;

6.3. The quorum for a standards meeting will be 50% of the committee members;

6.4. Each member of the committee attending a standards meeting will have one vote, including the Chair;

6.5. Proposals may only be carried forward when there is a clear consensus (80%) of those attending the meeting;

6.6. The Chair shall notify the Forth community and members of the committee of the time and place of each standards meeting at least three months prior to the date of the meeting;

6.7. The Chair shall publish an agenda at least one month before the meeting;

6.8. The Chair should recuse themselves in discussions of a proposal which they sponsor; the meeting should appoint a suitable neutral Chair for that discussion;

6.9. Two meeting secretaries will be appointed at the start of the meeting. They will be responsible for taking the minutes of the meeting;

6.10. Draft minutes should be circulated to the committee as soon as possible after the meeting and no later than two weeks after the meeting. The approved minutes should be published within four weeks of the meeting;

6.11. The committee may delegate a task to a subcommittee at any time. The subcommittee will be given a description of the task it is to perform, the aims, limitations, when and how it is to report back to the committee.

7. **Officers**

7.1. The officers are responsible for ensuring that the committee complies with its aims and is properly managed;

7.2. There are four officers, elected by a secret ballot of members at the Annual General Meeting:

   (a) Chair Schedules and runs the meetings and the process, including taking responsibility for agendas and minutes;

   (b) Editor Keeps the standard document up to date;

   (c) Technical Officer Manages the communication and website;

   (d) Treasurer Maintains any accounts of the committee and the membership list;

7.3. Officers shall be elected for a term of four years, with the opportunity for re-election;

7.4. In the event of the death or resignation of an officer, a member of the committee may be co-opted into the vacancy by the remaining officers;

7.5. Co-opted officers must retire or stand for election at the Annual General Meeting following their co-option.
8. Administrative Meetings

8.1. The Chair shall notify the committee of the time and place of each meeting at least two weeks prior to the date of the meeting, with a list of items to be discussed;

8.2. At administrative meetings, each officer shall have one vote. In the event of a tie the Chair shall have a second casting vote;

8.3. A quorum for an administrative meeting shall be three officers;

8.4. Administrative meetings may be virtual (e.g., via Telephone, eMail, chat, etc.);

8.5. Minutes shall be kept of all meetings.

9. Finance

9.1. The funds of the committee shall only be used for the purposes of the committee and no payment shall be made to any member except:

(a) if the member is employed by the committee or
(b) as a repayment of expenses properly incurred on behalf of the committee or
(c) as interest at a reasonable rate on money loaned to the committee;

9.2. The treasurer shall keep proper account of the finances of the committee and shall present a current statement to the committee at each of its meetings. Acceptance of these accounts by the committee shall be recorded in the minutes;

9.3. At the end of the financial year the treasurer shall prepare accounts for the year which shall be presented to the Annual General Meeting;

9.4. Funds received shall be paid into the “Forth Standards Committee” account;

9.5. Any member may request an account statement at any time, which must be provided within a month of the request;

9.6. The treasurer may be recalled by a general meeting.

10. Dissolution

10.1. The committee may be dissolved provided that two thirds of the members voting at a General Meeting are in favour of a motion to dissolve the committee, or in the event that the number of members falls below five;

10.2. If members decide to dissolve the committee any assets shall be transferred to the Forth-Gesellschaft e.V.;

10.3. Should the Forth-Gesellschaft cease operation before the dissolution of the committee, the former members may consider transferring the funds to a mutually agreed non-profit organisation or charity.

11. Change of Constitution

11.1. Changes may be made to this constitution provided that two thirds of the members voting at a General Meeting are in favour.

This Constitution was approved by Members at the Annual General Meeting held at Insel Reichenau on 7 September 2016.