ETSI OSG TFS
TeraFlowSDN

Working Procedures

V1.0
1. INTRODUCTION

The governance of OSG TFS is mainly structured into the following bodies:

- Leadership Group (LG)
- Technical Steering Committee (TSC)
- Module Development Groups (MDG)
- Dedicated Task Forces (TFs)

Organizations participating in these bodies and/or involved in code contributions shall sign the OSG TFS Member or Participant agreements to guarantee their adherence to the Terms of Reference and license(s) used in the project.

Organizations are represented by individuals. Individuals may contribute to OSG, as a member or leader of one of the previous bodies, participating actively in the administrative or technical coordination of the project. These are the roles that individuals can play:

- Member of a body
  - LG chair
  - LG member
  - TSC chair
  - TSC member
  - MDG lead
  - TF lead
  - Committers (relevant code contributors)
- Contributors (contributors of code, documentation, testing, bug reports…)
- Users

Next figure illustrates the different roles.
The bodies and roles, as well as the decision making processes, are described in detail in next sections.
2. GOVERNANCE BODIES

2.1. Leadership Group

2.1.1  Role of the body

Its role is to take decisions concerning the following:
- Setting the OSG’s vision
- Acting as external representatives of the OSG
- Managing the liaison with external organizations (SDOs, open source projects, etc.)
- Coordinating marketing efforts
- Ratifying the elected TSC chair
- Creating and terminating Task Forces (TF)
- Appointing the TF Leaders

The LG shall aim for vendor neutrality.

2.1.2  Membership of the body

The members of the LG are the OSG Chair and Vice-Chairs as elected by the members of the OSG according to the Terms of Reference (ToR). The LG Chair is the OSG Chair. There shall be a minimum of two (2) vice-chairs of the OSG.

2.2. Technical Steering Committee

2.2.1  Role of the body

Its role is to coordinate the project’s technical activities. Its functions include:
- Setting and evolving the overall software (SW) architecture of the project.
- Release management, timing and contents for each release.
- Collecting feature requests and prioritizing them per release.
- Ensuring the implementation of the feature roadmap and the Information Model.
- Setting basic implementation guidelines.
- Creating/removing Module Development Groups.
- Appointing Module Development Groups Leads.
- Fostering, supporting and growing the project’s community.

See the “decision making” section for details about voting procedures related to these functions.

2.2.2  Requirements for membership

TSC members are individuals nominated by those organizations that contribute most to the project. Each organization may nominate the individual (1 person per organization) that they want to represent them in the TSC. It is desired that the individual is a significant contributor in the project and a respected individual in the ecosystem. The initial TSC will be appointed by the LG.

The process to identify organizations who are eligible to nominate TSC members is detailed in the “Decision making” section. It follows these general guidelines:
- There will be a maximum of N members of the TSC (N=5 at project creation time)
- New TSC memberships will require being in the top number of merged (approved) contributions at organization level (historical contributions in the last 2 releases).
The process to elect new TSC members is also detailed in the “Decision making” section.

TSC membership will be updated after each release.

2.2.3 Leadership of the body

The TSC chair is elected by the TSC from the list of TSC members and ratified by the LG (see “Decision making” for details). The responsibilities of the TSC chair are:

- Setting periodic calls to drive technical activities inside the project and coordinate between modules and technical task forces
- Reporting (at least) monthly to the LG on the progress of technical activities
- Reporting progress periodically to the rest of the project
- Arbitrate feature ownership among development groups

2.3. Module Development Groups

2.3.1 Role of the body

A Module Development Group (MDG) is in charge of developing and maintaining a specific software module/library in the project. It is a pure technical group, consisting of code contributors, committers and, among them, a technical leader (MDG Lead) appointed by the TSC.

2.3.2 Requirements for membership

MDGs are created by the TSC to accommodate the number of active modules to the project needs. Whenever an MDG is created, there shall be at least 3 committers identified from the organizations participating in the project. If these requirements are not met, then the MDG cannot be created.

Membership to a MDG is open to any project contributor. The committer role is explained in detail in the Roles section.

At project creation time there will be one unique MDG in OSG TFS.

2.3.3 Leadership of the body

Whenever a new MDG is created, the TSC will elect an MDG Lead from the initial set of committers. Each MDG Lead will be the owner of that module and the interfaces where this module is “producer” and has the right to accept or reject code contributions based on technical reasons (alignment to the agreed scope, impact, stability after tests, etc.).

MDG Lead responsibilities include:

- Setting and evolving the internal SW architecture of that module
- Setting basic implementation guidelines for that module
- Accept/reject contributions to that module
- Reporting progress periodically to the TSC
- Setting periodic calls/animating the dedicated chat channel to drive technical activities inside the MDG

2.4. Task Forces

2.4.1 Role of the body

Task Forces may be created by the LG to support specific workloads and / or take care of certain activities: i.e. Marketing and Communication, Hackfests, ... Task Forces can be temporary or permanent.
A permanent Marketing and Communication task force will be created at OSG TFS Kick-off.

2.4.2 Requirements for membership

TF membership is open to any project member or participant willing to participate to the work (no need to be committer).

2.4.3 Leadership of the body

Task Force Leaders are appointed by the LG. The responsibilities of the TF Leader are:

- Ensuring the objectives of the TF are met
- Setting periodic calls for the TF
- Reporting progress periodically to the rest of the project
- Serving as contact person with the TSC and the LG.
3. OTHER ROLES

In addition to leading the bodies described in the previous sections, an individual may participate in the project playing other important roles. This section describes these other roles.

3.1. Users

Some of the most important participants in the project are people and organizations who use the software. Users can contribute to the OSG TFS by providing feedback to developers in the form of bug reports, feature suggestions and use cases. As well, users can participate in the community by helping other users on mailing lists and user support fora.

Users do not need to be affiliated to an organization to use the software, provide bug reports or subscribe to technical mailing lists, except for those restricted to OSG members and participants.

3.2. Contributors

Contributors are all the volunteers who are contributing code, documentation, or resources to OSG TFS. Contributions are not just code, but can be any combination of documentation, testing, user support, code, code reviews, bug reporting, community coordination, project marketing, or numerous other activities that help promote and improve the project and community.

3.2.1 Individual Contributors

Individual code contributions do not need to be affiliated to an organization to provide individual code contributions, but they are subject to the acceptance of an Individual Contributor Agreement. This is intended to guarantee their compliance with the license(s) and terms of reference of the project and will not imply acceptance of their code. The acceptance of their contributions will not grant participation in governance groups. Individual code contributions, even if merged/accepted, will not be considered in the TSC renewal process.

3.2.2 Corporate Contributors

Corporate contributors belong to an organization that has signed the OSG TFS member or participant agreement. Their contributions will be considered to rank their organization for eligibility in the TSC renewal process.

3.3. Committers

Committers are corporate contributors who make sustained formal contributions to the modules. Committers can participate in different MDGs, contributing code to different modules. Committers’ contributions that are merged/accepted by the MDG Lead and the TSC, will be considered to rank their organization for eligibility in the TSC renewal process.
4. DECISION MAKING

Decision making at OSG Plenary level takes place according to the procedures as defined in the OSG TFS Terms of Reference.

Specific decision-making procedures apply for decisions taken in OSG Governance Bodies.

4.1. Voting in Governance Bodies

Some decisions in Governance Bodies require votes on the project mailing lists or other reliable means provided by the host organization. Votes, when casted in mailing lists, should be clearly indicated by subject line starting with [VOTE]. Votes may contain multiple items for approval, and these should be clearly separated. Voting, by default, is carried out by replying to the vote mail, although, in some cases, the corresponding chair/lead may require the vote to be secret.

Voting may take four flavours:
• +1. "Yes," "Agree," or "the action should be performed." In the case of technical decisions, this vote also indicates a willingness on the behalf of the voter in "making it happen".
• +0. This vote indicates a willingness for the action under consideration to go ahead. In the case of technical decisions, this vote indicates that the voter will not be able to help.
• -0. This vote indicates that the voter does not, in general, agree with the proposed action but is not concerned enough to prevent the action going ahead.
• -1 This is a negative vote. On issues where consensus is required, this vote counts as a sustained opposition if binding (veto). All vetoes shall contain an explanation of why the veto is appropriate. It may also be appropriate for a -1 vote to include an alternative course of action.

All participants in the project are encouraged to show their agreement with or against a particular action by voting. For TSC decisions, only the votes of TSC members are binding.

For technical decisions in an MDG, in case an MDG Lead initiates a vote, the votes of its committers are binding.

Non-binding votes (i.e., from members not belonging to the specific group) are still useful for those with binding votes to understand the perception of an action in the community.

4.2. Approvals

In general, there are three types of approvals that can be sought:
• Lazy Consensus - Lazy consensus requires 3 binding +1 votes and no binding -1 votes.
• Lazy Majority - A lazy majority vote requires 3 binding +1 votes and more binding +1 votes than binding -1 votes.
• Lazy 2/3 Majority - Lazy 2/3 majority votes require at least 3 binding votes and more than twice as many binding +1 votes as binding -1 votes.

From this description, it is clear that vetoes are only possible in a Lazy Consensus vote.
4.3. LG

4.3.1 Membership changes

4.3.1.1 New LG members

Additional vice-chair positions in the LG might be proposed by an existing LG member through the LG mailing list. Once an LG Member proposes it, a new voting procedure shall be started in the LG in less than 2 weeks. The proposal should be accompanied by a brief rationale, and the role that the vice-chair position would play in the LG.

Once the voting procedure starts, the decision shall be approved by Lazy Consensus (no vetoes) of the LG members in one week time. In case of rejection, no new voting procedures might be open for that purpose in less than 6 months from the rejection.

If the LG decides to create additional vice-chair positions, additional vice-chairs are appointed according to the OSG Terms of Reference.

4.3.2 Decisions

4.3.2.1 Ratifying the TSC chair election

Whenever a new TSC chair is elected by the TSC members, the LG will open a call for ratifying that election. The TSC chair shall be approved by Lazy Consensus (no vetoes) of the LG.

In case the TSC chair is not approved by the LG, the decision will be communicated to the TSC, which will have to elect again a TSC chair. In the new elections, the previously elected TSC chair could be again selected by the TSC. In that case, the LG will open a second call for approving that election. In this second call, the decision can be ratified by Lazy 2/3 Majority of the LG.

4.3.2.2 Removing the TSC chair

Any LG member can propose a voting process for removing the TSC chair. The proposal shall be sent to the LG mailing list, accompanied by a rationale of the proposal for removal. Once received, a two-call process starts.

- A first call will be sent to the LG mailing list in order to decide if a removal voting process should take place. The decision will require approval by Lazy 2/3 Majority of the LG members.
- If approved, a second call will be sent to the LG mailing list in order to decide if the TSC chair is removed. The decision will require approval by Lazy Majority of the LG.

If approved in the second call, the TSC will open internally a call for candidates to TSC chair. The removed TSC chair will be able to submit his candidacy to this call.

4.3.2.3 Other Decisions

General decisions in the LG are taken using Lazy Consensus.

4.4. TSC

4.4.1 Membership changes

4.4.1.1 Renewal of TSC membership

TSC membership is driven by the actual code contribution to the project. Since the number of TSC members is capped to a specific value, the renewal of TSC members will be based on contribution figures per organization that are calculated from the number of merged (approved) contributions in the last 2 releases.
The metric initially used to evaluate contributions will be lines of code, but this can evolve, and more complex metrics be adopted as the project matures.

After every new release is launched, a process to renew the TSC will start. The contribution figure is then calculated for every organization that has committed code to the project. In order to guarantee manageable stability in the TSC leadership, the serving TSC chair is excluded from this process of automatic renewal.

In case that there are organizations obtaining a higher contribution figure than any of the current TSC members, then a renewal voting process starts. This process will involve:

- Those non-TSC members whose contribution figure is higher than the lowest contribution figure of a current TSC member. Those organizations will be asked for their willingness to be part of the TSC and, if they accept, they can propose an eligible candidate from their organization.
- Those current TSC members whose contribution figure is lower than the highest contribution figure of an eligible non-TSC member. Those organizations will be asked for their willingness to be part of the candidates for TSC election and, if they accept, they will propose an eligible candidate from their organization.

The number of free seats in the TSC is determined by the number of current TSC members whose contribution figure is lower than the highest contribution figure of any eligible non-TSC member.

There will be as many voting processes as free seats. In every voting process, one TSC member will be chosen from the list of candidates enumerated above.

Every eligible organization shall send to the General mailing list the name of the individual (candidate) that will represent their organization in the TSC, a brief rationale on why the candidate should be in the TSC, and a short description of their contributions to the project.

In every voting process, all TSC members (current at that round of vote) and the non-TSC candidates can participate. They can give:

- +2 votes to one of the candidates or to none of them
- +1 vote to another candidate or to none of them\(^1\).

The candidate with the highest number of votes will be declared TSC member. Once a new TSC member has been elected, the voting process with the remaining candidates is repeated until the number of free seats in the TSC is zero.

**4.4.1.2 Resigning as TSC member**

Any organization that is part of the TSC can resign to be part of the TSC at any time. The resignation shall be sent to the TSC mailing list and will be effective from that specific moment.

In order to be part of the TSC again, the organization can do it following the established procedures for new TSC membership.

**4.4.2 Decisions**

**4.4.2.1 Electing the TSC chair**

Whenever the TSC chairmanship is empty or after two years since its election, a call for candidates will be opened. Any TSC member willing to be the TSC chair can submit his candidacy to the TSC mailing list.

Once all candidacies are received, there might be different situations:

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\(^1\) In case an organization casted both +2 and +1 votes they should go to different candidates.
There are no candidacies. In such a case, the LG shall be informed. A new call for candidates will be opened, encouraging all TSC members to submit their candidacy. If no candidacies arrive, then all TSC members will become eligible for TSC chairmanship. A voting process will start with all TSC members as candidate. Each TSC member can give 1 vote to 1 candidate. The candidate with the highest number of votes will be elected TSC chair. In case of draw, a new voting round will start involving only those candidates in tie with the highest number of votes in the previous round.

There is only one candidacy. The candidate will be elected as TSC chair.

There is more than 1 candidacy. A voting process will start with those candidates. Each TSC member can give 1 vote to 1 candidate. The candidate with the higher number of votes will be elected as TSC chair. In case of draw, a new voting round will start involving only those candidates in tie with the highest number of votes in the previous round.

Once elected, the TSC chair shall be ratified by the LG following the procedure described as part of the LG decisions.

4.4.2.2 Resigning as TSC chair

The TSC chair can explicitly resign at any time. The explicit resignation shall be sent to the LG and TSC mailing lists and will be effective from that specific moment.

4.4.2.3 Choosing and prioritizing feature requests per release

With every new release, the TSC will compile a list and description of feature requests to be included in next release. The TSC shall discuss and prioritize them in order to be included in the next release, left for future releases or even discarded.

The TSC chair will decide, at his discretion, the way to discuss, discard and prioritize feature requests, always trying to reach the maximum consensus among the TSC members.

It shall be noted that the TSC is not forced to accept all feature requests, but it is required for TSC members to analyse and understand the feature requests, and the problems/use cases intended to be solved.

4.4.2.4 Creating a new MDG

MDGs can be created by the TSC at its discretion. Any TSC member can propose to create a new MDG. The proposal shall be sent to the TSC mailing list by a TSC member and shall include a rationale and at least 3 committers from different organizations participating in the OSG. One of the committers shall belong to an organization that is part of the TSC.

The decision to create a new MDG shall be approved by Lazy Consensus (no vetoes) of the TSC members. Once approved, an MDG Lead shall be elected by the TSC.

The TSC chair shall inform the LG in a timely manner about the main milestones during the process: the proposal to create a new MDG, the identification of at least 3 committers, the acceptance by the TSC members, and the final appointment of the MDG Lead.

4.4.2.5 Removing an existing MDG

Any TSC member can propose to remove an existing MDG. The proposal shall be sent to the TSC mailing list by a TSC member and shall include a rationale. The decision to remove an MDG shall be approved by Lazy 2/3 Majority of the TSC members.

The TSC chair shall inform the LG in a timely manner about the main milestones during the process: the proposal to remove an MDG, and the acceptance by the TSC members.
4.3.2.6 Electing MDG Leads

Whenever an MDG is created or an MDG Lead has resigned or been revoked, the TSC shall elect an MDG Lead. Any TSC member can propose an individual candidate for MDG Lead. Each of the candidates shall be accepted by Lazy Consensus of the TSC members.

The MDG Lead will be voted by the TSC members, who can give 1 vote to 1 candidate. There will be two rounds for voting:

- In the first round, if one candidate gets at least 3 votes and 2/3 of the votes, the candidate will be elected as MDG Lead. Otherwise, the second round will follow with the two most voted candidates.
- In the second round, the candidate with the highest number of votes will be elected as MDG Lead.

The TSC chair shall inform the LG about the elected MDG Lead.

4.4.2.7 Removing MDG Leads

Any TSC member can propose to remove an MDG Lead. The proposal shall be sent to the TSC mailing list by a TSC member and shall include a rationale. The decision to remove an MDG Lead shall be approved by Lazy Majority of the TSC members.

The TSC chair shall inform the LG in a timely manner about the main milestones during the process: reception of a proposal for removal, and final decision.

4.4.2.8 Approval of release candidate

Once the software composing the release is judged as sufficiently evolved, the TSC chair can call for a vote to approve the release candidate by Lazy Consensus.

In case the release candidate was not approved by Lazy Consensus, the TSC chair might call for a new vote after trying to address the comments from those who objected in the previous vote.

In case that, after a second TSC vote, the situation could not be unlocked, the TSC chair might exceptionally request the LG to allow the approval of the release by Lazy 2/3 Majority of the TSC. Authorizing this exception would require Lazy Consensus in the LG.

4.4.2.9 Other technical decisions

These Working Procedures encourage decisions based on consensus of all the TSC members. In case of conflict, the TSC chair will drive the discussion, with openness and always trying to reach the maximum consensus of the TSC members. The TSC chair will decide, at his discretion, the best way to discuss openly the technical matters. In case that it is not possible to reach full agreement without any objections, the TSC chair might call for a voting process. In that case, the following guidelines are recommended:

- Critical decisions require high consensus with no objections. In such a case, approval by Lazy Consensus of the TSC members is recommended.
- Other decisions require consensus, but objections might be allowed. In those cases, approval by Lazy 2/3 Majority or Lazy Majority of the TSC members is recommended.

4.5 MDG

4.5.1 Membership changes

4.5.1.1 New MDG committer

A Contributor that makes sustained, welcome contributions to the project may be invited to become a Committer. The invitation will be at the discretion of the MDG Lead or a TSC member.
The Contributor has to belong to an organization that has signed the TFS agreements to guarantee their adherence to the licenses being used in the project. This affiliation will be checked by the MDG Lead.

MDG committer access is by invitation only and shall be approved by a Lazy Consensus (no vetoes) of the active MDG committers.

4.5.1.2 Resigning as MDG committer

A Committer that is part of an MDG can explicitly resign to be part of the MDG at any time. The explicit resignation shall be sent to the TSC mailing list and will be effective from that specific moment.

A Committer that has not made any contribution in the last six months to an MDG will be declared as inactive and will be revoked implicitly as MDG Committer. To become an MDG Committer again, he/she shall be invited, following the established procedures for new MDG committers.

4.5.2 Decisions

These Working Procedures encourage decisions based on consensus of the active Committers and MDG Lead. In case of conflict, the MDG Lead will drive the discussion, with openness and always trying to reach the maximum consensus of the active Committers in the MDG. The MDG Lead will decide, at his discretion, the best way to discuss openly the technical matters. In case that it is not possible to reach full agreement without any objections, the MDG Lead might call for a voting process. In that case, the following guidelines are recommended:

- Critical decisions require high consensus with no objections. In such a case, approval by Lazy Consensus of the Committers is recommended.
- Other decisions require consensus, but objections might be allowed. In those cases, approval by Lazy 2/3 Majority or Lazy Majority of the Committers is recommended.

4.6 Task Forces

4.6.1 Membership changes

The TF Lead is appointed by the LG. For permanent Task Forces, the LG may decide to call for elections to appoint the TF Leader. If held, elections are run according to the ToR. The duration of the mandate of a TF Lead in a permanent TF is 2 years.

4.6.2 Decisions

Decisions in a TF are taken using Lazy Consensus.