



# CLASSES OF SERVICE

A class of service is used to determine the quality of service to apply to a work item. This technique is already commonly employed by support teams to handle change and defect requests and by networks (telecommunication and IT) where a class of service is usually assigned to a packet of data.

A set of policies<sup>1</sup> is attached to each class of service that defines how a work item with the specified class of service should be handled. These policies may cover: a prioritisation method, a target lead time, a WIP limit rule, a planning rule, a price, etc.

Classes of service, in conjunction with their policies, can be used to define Service Level Agreements (SLA) with customers. For instance, a team may say that a work item of class of service A, will be delivered in less than 30 days (target lead time) for a specific extra cost (price).

Classes of service are a short and simple technique that helps manage the flow of work and customer expectations.

## Implementation

### 1. Define a list of class of services:

If you have SLAs with your customers, use them as a base to define your classes of service.

If not, you can use David Anderson's list of classes of service as a starting point. You can read more details on these in our Prioritisation session:

- Expedite: item of the highest priority that can jump the queues and trump the WIP limits.
- Fixed delivery date: item with a guaranteed schedule.
- Standard class: the most common class. The item is prioritised within the team or company's standard prioritisation process and follows the normal process.
- Intangible class: items is not critical at the moment, but could well be in the future.

To ensure the pipeline does not get clogged up with expedite requests, or intangibles get forgotten, the team needs to pull in a pre-determined mixture of classes of service.

### 2. Define a set of unambiguous policies per class of service

Does the class of service have an impact on the priority? And the prioritisation mechanism employed?

Should the agreed work process be different for this class of service?

Do the WIP limits apply to this class of service? You can define different WIP limits for each class of service, as well as to each part of the process.

Outcome

Function

Benefit

Who

Scaling Factors

Difficulty

<sup>1</sup>In the Network domain, the engineers speak of QoS (Quality of Service) that are attached to the CoS (Classes of Service).



Does the class put constraints on cycle times or on lead time?

Should you ask your customers to pay an extra cost if they ask for this class of service?

How will this class of service be represented in the team's visual management system (e.g. Kanban board):

- Stickers of different colours or labels may be used.
- Swim lanes can be associated to one or more classes of services.

ANALYSIS		DESIGN		DEVELOPMENT	
WIP LIMIT - 2		WIP LIMIT - 3		WIP LIMIT - 3	
In progress	Done	In progress	Done	In progress	Done

### 3. Publish the classes of service and the policies

Present the classes of service and their policies to all members of the team and to the customers (may be done through SLAs).

The policies should be in a documentation repository accessible to all the members of the team.

### 4. Assign a class of service to every work item that enters the team's input queue as soon as possible.

### 5. Use them during your meetings (e.g. daily stand-ups, planning meetings).

### 6. Monitor their usage and impact.

## Potential pitfalls

### Too many classes

You should not define more than four or six classes of service. Too many creates a complex classification that is difficult to understand and manage. This practice aims to provide a simple way of categorising work to manage the flow better and improve the customer's satisfaction through different SLAs; we do not want to add complexity.

### Too complex or too many policies

The policies associated to the classes of service should be unambiguous, short (one line) and easy to understand. Furthermore, since everybody should remember them, do not create too many; six policies per class should be considered as a maximum.

### Used as the sole prioritisation method

This technique helps a team and the customers classify the work items. It should be used in conjunction with prioritisation techniques (e.g. weighted shortest job first, MoSCoW, equity, cost benefit analysis, value divided by effort, etc.). A different prioritisation technique may be applied per class of service. Classes of service are generally too coarse to be used as the sole prioritisation method.

If you want to learn more, consider reading:

*Kanban* by David Anderson

*The Principles of Product Development Flow* by Donald Reinertsen