# Manual preference selection

Preference selection is nearly always implemented by providing a range of forms with controls for enabling or choosing options for each preferences. These forms can be complex in detail such audio configuration, or complex by fact of their sheer size. A specific preference can be hard to locate in control panels with many options even if both search and browsing are provided as with Windows control Panel.

In situations where there are a very large number of preferences that can be set, it is unreasonable to expect any user to have to locate and set each preference. The use of templates and inference mechanisms are ways to support the user in getting a set of preferences that are well-aligned to their own individual needs.

# Templates

The use of custom templates of default preferences for particular groups of users is one method by which members of those groups can be immediately provided with potentially useful settings across a wide range of products and services as a starting point. The task for individual users would then be greatly reduced as they would only need to adjust those default settings that did not match their own personal preferences or needs. The ETSI work [ETSI1] suggests that organisations that represent such groups of users could develop and promote the use of such user profile templates to their client groups.

Selecting "Use typical settings" when installing a program is effectively using a template that defines a well-balanced set of preferences for a typical user. Clicking on one or more check boxes before selecting "Use typical settings" could allow one of two or three alternative templates to be applied. The [ETSI1] and [ETSI2] documents listed in the references describe mechanisms for creating, modifying and applying templates.

#  Inferring Preferences

Commercial services frequently use inference algorithms to infer preferences from user behaviour. Such inference methods can also be of value in non-commercial personalisation schemes that are solely designed to benefit the user. However, inferred preferences will always be wrong, even if they only fail to capture minor individual quirks. It is therefore important for users that they are able to correct inaccurate inferences.

# Managing user preferences

Another issue is that changes to settings may not take immediate effect, or if they do, it may be difficult to roll back from a setting that was tried out of curiosity but is unsuitable for the user.

As a result people with cognitive disabilities can be become daunted, or worse, completely unable to select their desired preferences. Indeed depending on the individual and the technology being used it may be impossible with a supporter's assistance

So specific problems for people with cognitive disabilities include:

* Too many settings and/or options for each
* Not knowing what their preferences are in terms of the available technical solutions
* Not being aware of possible solutions

In fact, many of these options effect a wide range of users, not just those with cognitive disabilities.

# Potential Solutions

The GPII Cloud4All project includes research and development to provide tools to address many of these issues. It is also involved in [standardisation work](http://wiki.gpii.net/w/Standardization_Roadmap) including ISO/IEC 24751, Individualized adaptability and accessibility in e-learning, education and training.
**[NOTE:** The standardisation roadmap completely ignores the extensive ETSI work in the area (see some examples below)].

# References

[ETSI1] EG 202 325 "Human Factors (HF); User Profile Management" at <http://www.etsi.org/deliver/etsi_eg/202300_202399/202325/01.01.01_60/eg_202325v010101p.pdf>

[ETSI2] ES 202 746 "Human Factors (HF); Personalization and User Profile Management; User Profile Preferences and Information" at <http://www.etsi.org/deliver/etsi_es/202700_202799/202746/01.01.01_60/es_202746v010101p.pdf>

[ETSI3] ES 202 642 "Human Factors (HF); Personalization of eHealth systems by using eHealth user profiles (eHealth)" at <http://www.etsi.org/deliver/etsi_es/202600_202699/202642/01.01.01_60/es_202642v010101p.pdf>

[ETSI4] TS 102 747 "Human Factors (HF); Personalization and User Profile Management; Architectural Framework" at <http://www.etsi.org/deliver/etsi_ts/102700_102799/102747/01.01.01_60/ts_102747v010101p.pdf>