

# Towards a General Characterisation Scheme for Inhabited Information Spaces

Niels Ole Bernsen and Laila Dybkjær  
The Maersk Mc-Kinney Moller Institute for Production Technology  
Odense University, Denmark  
nob@mip.ou.dk, laila@mip.ou.dk

The tables on the following pages present a first draft general characterisation scheme for inhabited information spaces. The scheme should enable comparison of widely different inhabited information spaces. The tables compare different potential versions of Magic Lounge, ranging from the “Users’ Magic Lounge” and the EITC’97 (European Information Technology Conference 1997) demonstrator to the three planned Magic Lounge Project Demonstrators at Year 1, Year 2 and Year 3, respectively, and the first functionality and architecture specification [Dybkjær and Bernsen 1998a&b]. The following pages show diagrams of some of the Magic Lounge versions, i.e. the “Users’ Magic Lounge” (Figure 1), the EITC’97 demonstrator (Figures 2 and 3), and a highly incomplete diagram of the Year 3 demonstrator (Figure 4). The tables were made in January 1998 and will be updated after the first year of the Magic Lounge project, i.e. in July 1998.

The way to test and generalise the present draft general characterisation scheme for inhabited information spaces would seem to be to represent a range of other inhabited information spaces by means of the scheme. This is planned work.

## Legendum

User ML = Magic Lounge as proposed by the users in response to the First Magic Lounge Questionnaire [Bernsen 1997, Bernsen 1998, Bernsen and Dybkjær 1997a, Bernsen and Dybkjær 1997b, Bernsen and Dybkjær 1997c], cf. Figure 1.

EITC’97 = Magic Lounge as specified for the European IT Conference Exhibition, Brussels, November 1997 [Dybkjær and Bernsen 1997], cf. Figures 2 and 3.

Year 1 = Magic Lounge as specified in the Project Programme for the Year 1 Demonstrator.

Year 2 = Magic Lounge as specified in the Project Programme for the Year 2 Demonstrator.

Year 3 = Magic Lounge as specified in the Project Programme for the Year 3 Demonstrator, cf. Figure 4.

MLArc = The first functionality and architecture specification of Magic Lounge [Dybkjær and Bernsen 1998a&b].

Grey rows = Headlines in the table following the interaction model in [Bernsen 1997b].

x = The version of Magic Lounge in question has/should have this feature according to a certain specification in the table.

- = The version of Magic Lounge in question does not/should not have this feature.

? = Decision should be made as to whether a certain version of Magic Lounge should have this feature.

(x) = The feature is compatible with the first functionality and architecture specification of Magic Lounge but has not been represented explicitly in the specification.

**x!** = The version of Magic Lounge in question should have (*and* does not currently have) this feature according to the Magic Lounge Project Programme. This mark (coloured red in the electronic version) represents contractual work to be done. The marks for Year 1 represent work to be done now.

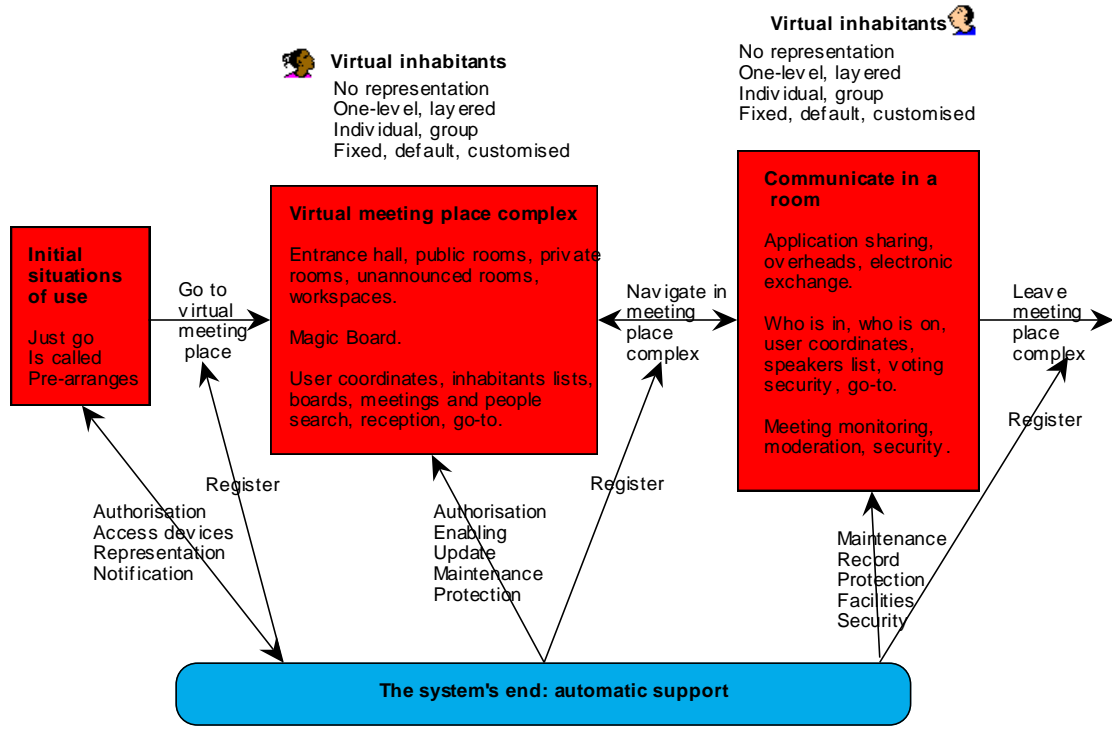
Empty cells = It is so far undecided or unconsidered whether a version of Magic Lounge should have this feature.

Functionality	User ML	EITC 97	Year 1	Year 2	Year 3	MLArc
<b>1. Getting ready</b>						
Units and Devices inventory						
Unit: Simulated telephone	-	x	-	-	-	-
Unit: Telephone	x	-	x!	x!	x!	x
Unit: Mobile phone	x	-	x!	x!	x!	x
Unit: PDA	x	-	x!	x!	x!	x
Unit: Workstation	x	x	x	x	x	x
Device: Video camera	x	-	x!	x!	x!	x
Device: Microphone	x		x!	x!	x!	x
Device: Keyboard	x	x	x	x	x	x
Device: Mouse	x	x	x	x	x	x
Device: Loudspeaker	x		x!	x!	x!	x
Device: Display	x	x	x	x	x	x
User actions						
Being called: a. from person in ML	x	-				(x)
..... .b. by ML, e.g. meeting imminent	x	-				-
Provide general ML password	x	-	-	-	-	-
Provide personal ML login and password	x	-	x	x	x	x
Provide specific authorisation (room password)	x	-	x	x	x	x
User tells ML about devices	?	-	-	-	-	-
Specify representation: Of user	x	-	-	-	-	-
Specify representation: Of others	x	-	-	-	-	-
<b>2. Going into ML</b>						
User goes to entrance hall first	-	x	-	-	-	-
User goes anywhere	x	-				x
ML registers user's access devices	-	x	x	x	x	x

Functionality	User ML	EITC 97	Year 1	Year 2	Year 3	MLArc
<b>3. Meeting complex and facilities</b>						
Rooms inventory						
Public entrance hall	x	x	x	x	x	x
Public meeting rooms	x	x	x	x	x	x
Private meeting rooms	x	-	x!	x!	x!	x
Unannounced meeting rooms (invisible from any perspective)	x	-				-
Professional workspaces	x	-			?	?
Lounge metaphor graphics layout	?	-	x!	x!	x!	(x)
Ubiquitous facilities						
List of all rooms	-	x	x	x	x	x
List of who is logged in a room	-	x	x	x	x	x
Create new meeting room		x	x	x	x	x
Making meetings private or public	-	-				x
Delete meeting room		-	x	x	x	x
Go to room, incl. authorisation if needed	x	-	x	x	x	x
List of how the inhabitants are logged in		-				x
Meeting log/dialogue history	x	-	x!	x!	x!	x
Filtered retrieval from history		-	x!	x!	x!	x
Web browser	x	x	x	x	x	x
Speech and gesture interrogation of graphics		-	x!	x!	x!	x
Speech operated travel information retrieval		-	-	x!	x!	x
Text-to-speech		-	-	x!	x!	x
Speech-to-text		-	-	x!	x!	x
Graphics to text and speech		-	-	x!	x!	x
Intelligent abstraction from details (summary)		-	-	x!	x!	x
Speech-based search		-	-	-	x!	x
Adaptive access to information		-	-	x!	x!	x
Searchable list of ML user coordinates	x	-				x
Advanced search for people	x	-				-
Knock the door of a closed meeting	x	-				?
Specify representation: Of user	-	-				x
Specify representation: Of others	-	-				x
Entrance hall						
List of who is logged in the hall	x	x	x	x	x	x
List of who is logged in ML generally	x	-				x
Message exchange/announcement board	x	-				x
Meeting overview board	x	-	-			
Public meeting overview board		-				(x)
Room overview board	x	x	x	x	x	x
Search on meeting topics	x	-				(x)
Making meetings private, public, unannounced	x	-				-
Locking meeting rooms	x	-				-
Public, private and unannounced rooms						
List of who is logged in	x	-	x	x	x	x
List of regular or invited/expected participants	x	-				(x)
Search for people in large meetings	x	-				?
Allow/deny access to people "knocking"	x	-				?
ML notifies/warns of room non-use	x	-				x
Professional workspaces						
List of who is logged in	x	-	-			x
Allow/deny access to people "knocking"	x	-	-			?

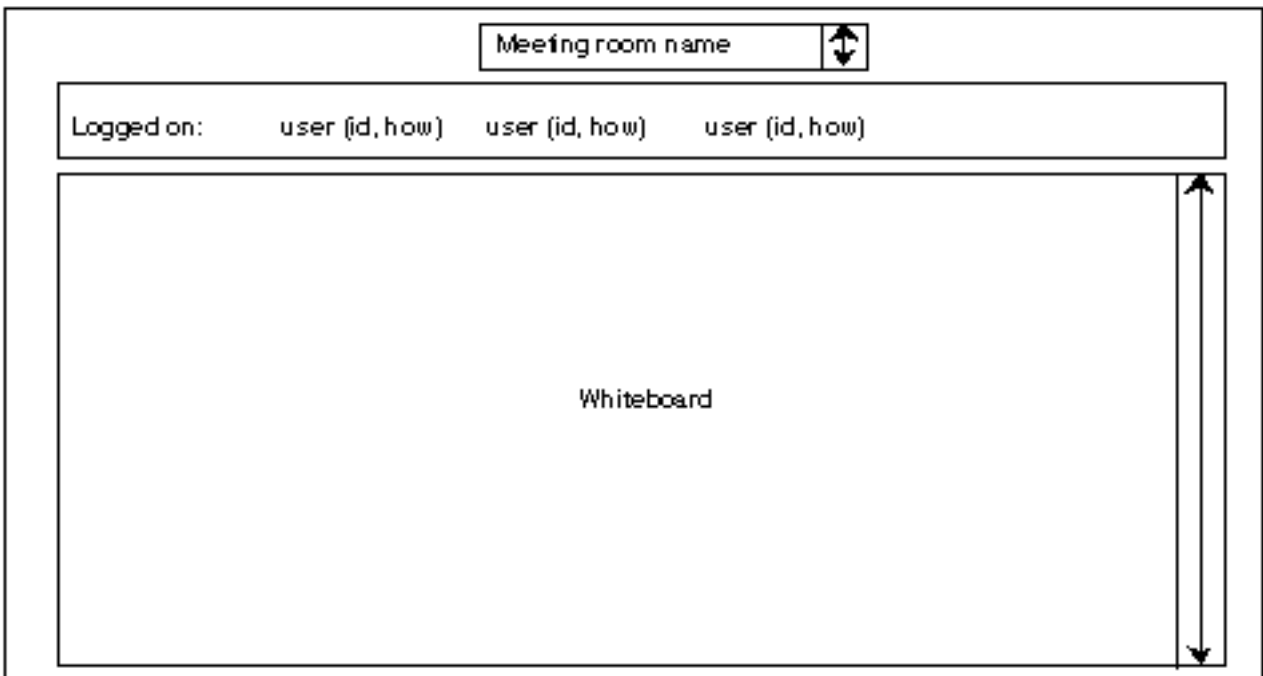
Functionality	User ML	EITC 97	Year 1	Year 2	Year 3	MLArc
<b>4. Navigate in meeting complex</b>						
Optionally, the user moves around	x	x	x	x	x	x
<b>5. Communicate in a room</b>						
Ubiquitous facilities						
Whiteboard (scrollable, text only)	-	x	x	-	-	-
Hypertext/hypermedia magic board		-	-	x!	x!	(x)
Send email	x	-				x
Phone someone		-				x
Fax someone		-				x
Video conference		-				x
General application sharing	-	-				x
Multi-party communication (+2 people)	x	x	x!	x!	x!	x
Contacting others individually in meetings	x	-				x
Entrance hall						
Make clear who is communicating	x	x	x	x	x	x
Public, private and unannounced rooms						
Make clear who is communicating	x	-	x	x	x	x
Who has temporarily "left" the room	x	-				x
Advanced application sharing	x	-				x
Show overheads and slides	x	-				x
Electronic exchange of meeting material	x	-				x
Electronic exchange of software	x	-				(x)
Faxing overheads and other meeting material	x	-				x
Producing public web sites	x	-				(x)
Maintain a speakers list (formal meetings)	x	-				(x)
Secure speaker identification	x	-				-
Shared workspaces						
Who has temporarily "left" the room	x	-				x
Advanced application sharing	x	-				x
<b>6. Leave meeting complex</b>						
The user just leaves	x	x	x	x	x	x
The user goes to other inhabited info spaces		-	-	-	x!	x

Functionality	User ML	EITC 97	Year 1	Year 2	Year 3	MLArc
<b>7. Representation of self and others</b>						
Make oneself visible or invisible to others	x	-				(x)
One-level vs. multiple representation	multiple	one			one	multiple
Individual vs. group member	both	indiv			indiv	indiv
Fixed vs. default vs. full customisation	def-cus	fixed	-			def/cus
Co-presence by voice	x	-	x!	x!	x!	x
Co-presence by video	x	-	x!	x!	x!	x
Icon-based presence of humans and system		-	-	x!	x!	x
User delegates		-	-	-	x!	x
System presence as active info provider		-	-	-	x!	x
<b>8. Privacy</b>						
Getting ready						
How get authorisations	?	?	?	?	?	?
Meeting complex and facilities						
Hall board shows user coordinates	x	-				(x)
Hall board shows public rooms		x	x	x	x	x
Hall board shows private rooms		-				x
Hall board shows public meetings	x	-				x
Hall board shows private meetings	?	-				-
Hall board shows people in public places	x	x				x
Hall board shows people in private places	?	-				-
Private meetings announced by default	?	-				-



**Figure 1.** The “users’ Magic Lounge”.

Computer



**Figure 2.** The EITC’97 Magic Lounge (workstation client).

Simulated telephone

Meeting room name	<i>This field only shows briefly when the user enters the meeting room.</i>
Logged on: user (id, how) user (id, how) user (id, how)	<i>This text field only shows briefly when the user enters the meeting room and when somebody logs on/out.</i>
<i>Text field: only shows most recent contribution (either from the person with the phone or from another participant).</i>	<input type="radio"/> Go to another room <input type="radio"/> Create new room

Figure 3. The EITC'97 Magic Lounge (simulated telephone client).

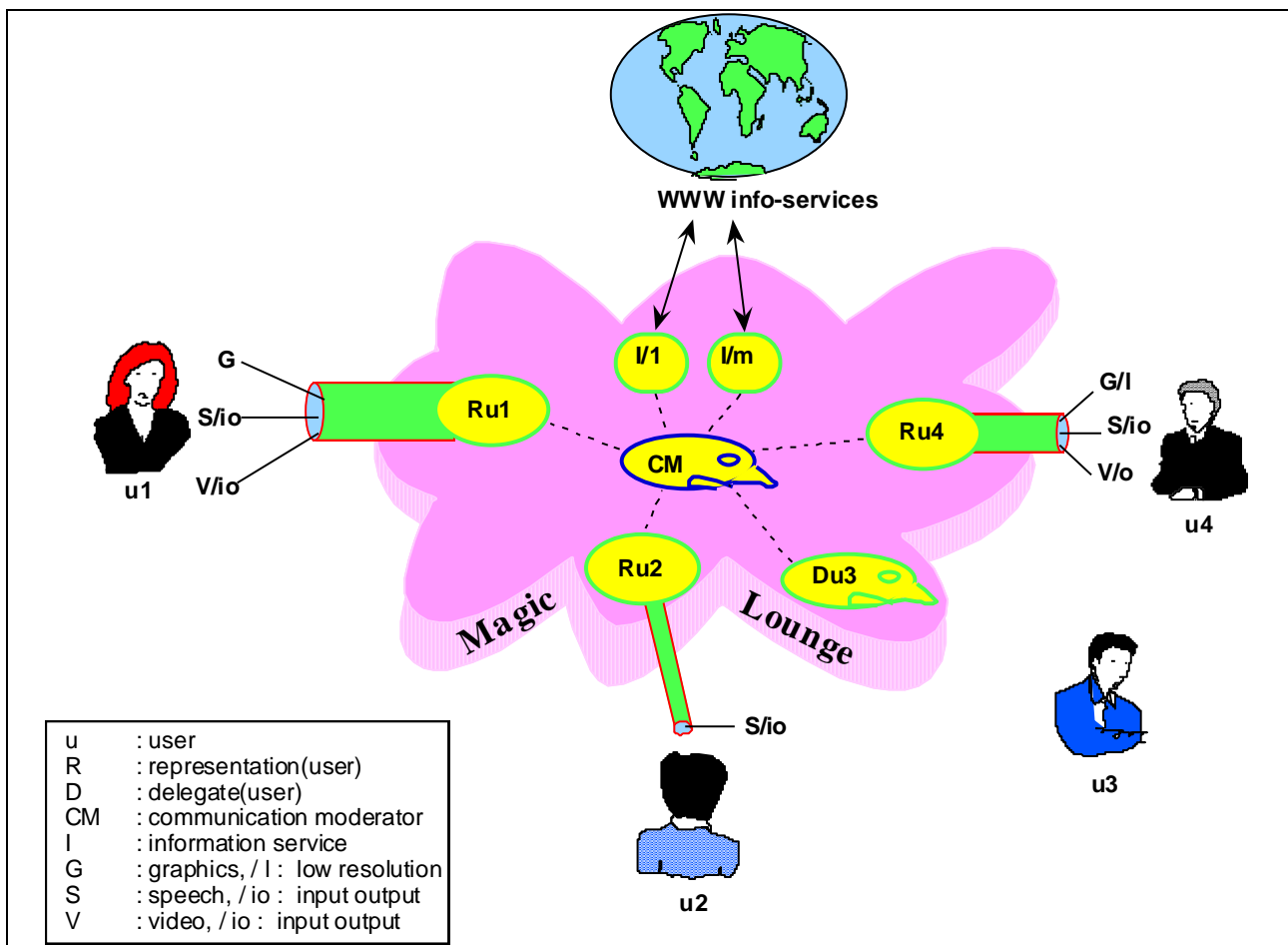


Figure 4. Raw sketch of the final Magic Lounge (Year 3).

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