



**Integrated Project on Pervasive Gaming
FP6 - 004457**

WorkPackage WP15: *Demonstration*

Deliverable Wrapper Document

Deliverable D15.1: Project Level Demonstrations for all Showcases

Deliverable D15.2: Staging of Enhanced Reality Larp Event

Deliverable 15.3: Staging of Public Performance, City as Theatre

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EXECUTIVE SUMMARY

During the first phase of IPerG, a set of demonstrators were produced. These fall into two categories: ‘project level’ demonstrations used by the IPerG participants at conferences, exhibitions and workshops, and a set of events open to the public or to invited participants.

This document summarizes the demonstrator deliverables and points to available documentation relevant to these.

The following demonstrators are described.

D15.1 ‘project level’ demonstrations. This deliverable includes:

- A demonstrator of the PART architecture (WP6);
- A demonstrator of the log analysis tool (WP7);
- Two event documentation videos (WP8 and WP12);
- Two technology-enhanced board games (WP9);
- A technology demonstrator for a massive multiplayer online game with location-based mobile phone functionality (WP10);
- Three in-game artifacts with accompanying software (WP11).

D15.2 Live role-playing events relying on technology-enhanced game artifacts. Two events were produced: the Prosopopeia event and the Kejsartemplet event. These event were produced and organized by WP11.

D15.3 First performance with the Day of the Figurines game. This event was produced and organized by WP12.

One extra event was produced by WP8, an event based on the Epidemic Menace design. It is included in this deliverable wrapper as **D15.extra**.

Deliverable Identification Sheet

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Abstract (for dissemination)	<p>During the first phase of IPerG, a set of demonstrators have been produced. These fall into two categories: ‘project level’ demonstrations used by the IPerG participants at conferences, exhibitions and workshops, and a set of events open to the public or to invited participants.</p> <p>This document summarizes the demonstrator deliverables and indicates where documentation about them can be found.</p>
Keywords	Demonstrator, public performance, event, prototype, game session

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1 INTRODUCTION

The demonstration work package consists of all demonstration activities within the project. The responsibility of producing the demonstrations is distributed to the individual showcase work packages. Each showcase is required to produce one 'packable and portable' demonstration in each phase, and at least one demonstration event during the duration of the showcase.

All showcases have managed to produce 'packable and portable' game demonstrations.

More specifically:

- WP8 has produced a video based on the Epidemic Menace event organised at Sankt Augustin (FIT premises) in August 2005.
- WP9 has produced two augmented board games: Augmented Diamond Hunt and Wizard's Apprentice.
- WP 10 has produced a concept demonstrator ('Garden of Earthly Delights') consisting of a PC system and an emulated mobile client.
- WP11 has produced a set of game artefacts which have been demonstrated on numerous occasions, including during the IPerG Open Day 12/09/2005.
- WP12 has produced a video based on the August event ('Day of the Figurines').

In addition the software research themes have produced demonstrations of generic software and tools that are useful for the development, configuration, and support of pervasive games.

In the work plan, only two events were planned; a live role-playing event arranged by WP11 and a performance organised by WP12. Both of these were carried out ahead of plan - with the WP11 event taking place in June 2005 and the WP12 event in August 2005.

In addition, WP11 participated in an externally arranged event ('Kejsartemplet') in July 2005 and WP8 arranged an event in August 2005. In this document, we treat the WP8 event as an extra deliverable.

This document summarizes the demonstrator deliverables and indicates where documentation about them can be found. It is organized as follows.

- Section 2 describes the project-level demonstrators from both research work packages and showcase work packages.
- Section 3 describes the enhanced reality Larp events produced by WP11.
- Section 4 describes the first public performance of Day of the Figurines produced by WP12.
- Section 5 describes an additional game event produced by WP8, testing the first version of Epidemic Menace.

2 D15.1: PROJECT-LEVEL DEMONSTRATORS FROM ALL SHOWCASES

All showcases have produced 'packable and portable' game demonstrations. WP8 has produced a video based on the August event. WP9 has produced two augmented board

games. WP 10 has produced a concept demonstrator consisting of a PC system and an emulated mobile client. WP11 has produced a set of game artefacts which have been demonstrated on numerous occasions – these are however barely portable (‘draggable’) as all of them are rather large in size. WP12, finally, has produced a video based on the August event.

In addition WP6, WP7, WP8, and WP12 have produced demonstrations of generic software and tools that are useful for the development, configuration, and support of pervasive games.

2.1 Project-level demonstrations from research work packages

2.1.1 The PART architecture for ad-hoc networking

The PART architecture has been made demonstrable through this simple software application. The demonstration shows how PART can be used to distribute data and maintain a synchronised game state between a number of processes. The demonstration uses two mobile phones, a PC and a TINI microcontroller. One of the phones is connected via Bluetooth to a GPS receiver. The TINI is connected to a temperature sensor. PART is used to distribute the GPS and temperature data among the devices. The demo is intended as a “technology demonstration”, i.e., an example of what can be achieved using PART.

Demonstrator	The first version of the PART runtime architecture.
Produced by	WP6
Type	Software prototype
Demonstrated at	051128 project review in Bonn
Accessible from	http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/d36665979/ PART_technology_demo1.zip
Accompanying material	Instructions on how to install and run the demonstration can be found in: http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/d36666021/ PART_technology_demo1_instructions.doc
Contact person	Olov Ståhl (SICS), olovs@sics.se .

2.1.2 Logfile analysis tool

The logfile analysis tool is a generic but useful tool for analysis of arbitrary log files which is planned to be used in numerous showcases within IPerG. It has been made demonstrable primarily for internal dissemination purposes.

Demonstrator	A logfile analysis tool
Produced by	WP 7
Type	Software prototype
Demonstrated at	At the IPerG Review, November 28, 2005

Accessible from	http://fit-bscw.fit.fhg.de/bscw/bscw.cgi/d36507977/lat-release.zip
Accompanying material	User manual is included in the zip file.
Contact person	Wolfgang Appelt (FIT), appelt@fit.fraunhofer.de

2.2 Project-level demonstrations from showcases

2.2.1 Epidemic Menace (WP 8)

Epidemic menace is demonstrated through a video reportage based on an August test session with the game.

Demonstrator	Epidemic Menace Video
Produced by	WP8
Type	Video
Demonstrated at	IPerG Plenary, Stockholm, Sweden, 2005-09-12 IPerG Review, Sankt Augustin, Germany, 2005-11-28 The TV show GIGA TV.
Accessible from	Soon available at http://iperg.fit.fraunhofer.de . Currently, it is available at http://www.giga.de/index.php?storyid=127348 .
Accompanying material	-
Contact person	Sabiha Ghellal, Sony Netservices, Sabiha_Ghellal@sonynetservices.com

2.2.2 Socially Adaptable Games (WP 9)

This work package has designed three socially adaptable board games, of which two have been implemented and function as the project-level demonstrations of the work package results. The Augmented Diamont Hunt is a game which was not designed within IPerG, but which was enhanced by IPerG technology to increase its social adaptivity. The Wizard's Apprentice game was designed and implemented by the work package team.

Demonstrator	Augmented Diamond Hunt
Produced by	WP 9
Type	Hardware and Software Prototype
Demonstrated at	Vetenskapsfestivalen, Göteborg, Sweden, 2005-04-26, Dreamhack, Jönköping, Sweden, 2005-06-16, IPerG Plenary, Stockholm, Sweden, 2005-09-12, Pervasive Communication Conference, Copenhagen, Denmark, 2005-10-05

Accessible from	The software can be downloaded from the BSCW server, http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36500562 . The hardware is kept by the contact person.
Accompanying material	Instructions of how to set-up the prototype are included in the software distribution.
Contact person	Johan Peitz, Interactive Institute, johan.peitz@tii.se

Demonstrator	Wizard's Apprentice
Produced by	WP 9
Type	Augmented Board Game
Demonstrated at	IPerG Plenary, Stockholm, Sweden, 2005-09-12 IVA meeting, Stockholm, Sweden, 2005-11-15 , IPerG Review, Sankt Augustin, Germany, 2005-11-28
Accessible from	The software can be downloaded from the BSCW server, http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36500582 . The hardware is kept by the contact person.
Accompanying material	Instructions of how set-up the prototype are included in the software distribution.
Contact person	Johan Peitz, Interactive Institute, johan.peitz@tii.se

2.2.3 Garden of Earthly Delights (WP 10)

The WP10 demonstrator is primarily a technology demonstrator, showing how a PC-based massive multiplayer game can include a position-sensitive mobile client. The most salient features of the design of the game Garden of Earthly Delights is also shown by the demonstrator, including the different play modes for PC and mobile players.

Demonstrator	Garden of Earthly Delights
Produced by	WP 10
Type	Software, consisting of a PC-based server, a PC client, a mobile client relying on server-supplied positioning.
Demonstrated at	IPerG Plenary, Stockholm, Sweden, 2005-09-12 IPerG Review, Sankt Augustin, Germany, 2005-11-28
Accessible from	The software can be downloaded from the BSCW server, http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36596160
Accompanying material	Instructions of how set-up the prototype are included in the

	software distribution.
Contact person	Craig Lindley, Gotland University, Craig.Lindley@hgo.se

2.2.4 Enhanced Reality Live Role Playing (WP 11)

The eLARP work package has produced a set of prototypes for in-game artefacts that support enhanced reality live role playing. The prototypes have all been tested in the two eLARP events, Prosopopeia and Kejsartemplet. The EVP machine was designed for the Prosopopeia event and includes a ghost communicator built into a reel-to-reel tape recorder, and a ghost voice synthesizer implemented in software. The magic chest was designed and used in the Kejsartemplet event and consists of a chest with a magical puzzle lock. When the right code is laid, a hidden message appears at the bottom inside the chest. The crystal and bracelet design was also used in Kejsartemplet and illustrates how players can be remotely informed about an in-game event.

Demonstrator	EVP Machine
Produced by	WP11
Type	Computer enhanced game artefact
Demonstrated at	Prosopopeia event 2005-06-10 – 2005-06-12 SITI conference 2005-06-16 IPerG Plenary, Stockholm, Sweden, 2005-09-12
Accessible from	The Thanatos software is downloadable from http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36519654 The hardware is kept in Kista, Sweden.
Accompanying material	Usage instruction in Deliverable D11.3
Contact person	Karl-Petter Åkesson, Swedish Institute of Computer Science, kalle@sics.se

Demonstrator	Magic Chest
Produced by	WP11
Type	Computer enhanced game artefact
Demonstrated at	The Kejsartemplet event, 2005-07-21-2005-06-24 IPerG Plenary, Stockholm, Sweden, 2005-09-12
Accessible from	Kept at SICS in Kista, Sweden.
Accompanying material	-
Contact person	Karl-Petter Åkesson, Swedish Institute of Computer Science, kalle@sics.se

Demonstrator	Magic bracelets, and a crystal placed in a socket
Produced by	WP11
Type	Computer enhanced game artefacts
Demonstrated at	The Kejsartemplet event, 2005-07-21-2005-06-24 IPerG Plenary, Stockholm, Sweden, 2005-09-12 IPerG Review, Sankt Augustin, Germany, 2005-11-28
Accessible from	Kept at SICS in Kista, Sweden.
Accompanying material	-
Contact person	Karl-Petter Åkesson, Swedish Institute of Computer Science, kalle@sics.se

2.2.5 Day of the Figurines (WP 12)

Day of the Figurines is demonstrated through a video reportage based on the August test session with the game.

Demonstrator	Day of the Figurines video
Produced by	WP12
Type	Video
Demonstrated at	IPerG Plenary, Stockholm, Sweden, 2005-09-12 IPerG Review, Sankt Augustin, Germany, 2005-11-28
Accessible from	http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/d36529695/Day%20of%20the%20Figurines%20-%20small%20(MPEG1).mpg
Accompanying material	-
Contact person	Martin Flintham (University of Nottingham) mdf@cs.nott.ac.uk ,

3 D15.2: STAGING OF ENHANCED REALITY LARP EVENT

3.1.1 Prosopopeia

The first Prosopopeia event was carried out as an experiment in hosting a city-wide LARP which still was heavily game-mastered. The game was designed as part of the WP11 work, and organised in collaboration with Swedish hobbyist larpers. Several of the central game design elements, such as the possession model of role-taking, were proven to be highly successful, both working in practice and highly appreciated by the players. The technology experience was however sobering: although voice communication between game masters and players proved very successful and the design of the EVP machine was appreciated, the chosen means for

player surveillance proved insufficient. In particular, it proved insufficient and very time-consuming to base game mastering on video surveillance. In the second version of Prosopopeia, we will rely more on automatic means for player interaction through sensors and actuators, and also provide means to alert the game masters of interesting player activities.

Event	Prosopopeia
Produced by	WP11
Event took place in	Stockholm, Sweden, 1-13 June 2005.
Number of participants	12 players and about 10 non-players (organisers and specially instructed players)
Available event documentation	Photos, Deliverable D11.2 Game design, Deliverable 11.3 Larp prototype game, Deliverable D11.4 Evaluation.
Available from	Photos and video available at: http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36413174 Deliverables downloadable from: http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36274221
Contact person	Karl-Petter Åkesson, Swedish Institute of Computer Science, kalle@sics.se

3.1.2 Kejsartemplet

The Kejsartemplet event was run by external Larp organisers. For this event, IPerG designed and implemented a set of in-game artefacts, each enhancing the role play experience in different ways. These included the magic chest and the crystal and bracelets described in section 2.2.4, but also two “telepathic hats”, hats with built-in mobile phones, which enabled the players to keep in constant contact. The event proved a successful use of these technology enhanced game artefacts. It was also a successful example of how the IperG project can collaborate with external organisers in creating meaningful game content that at the same time provides a challenging technology experience. This event and the technology used in it set out the course for technology development for the second year of the ELarp workpackage.

Event	Kejsartemplet
Produced by	WP11 together with external organizers
Event took place in	Ramshyttan, north of Örebro, Sweden, July 20-24, 2005
Number of participants	About 400 players
Available event documentation	Photos, a short in-game bad quality video, the website http://www.kejsartemplet.se (in Swedish only). The design and evaluation of the in-game prototypes will be reported in an internal deliverable (forthcoming January 2006).

Available from	Event documentation is available from: http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36388913 and http://www.kejsartemplet.se
Contact person	Karl-Petter Åkesson, Swedish Institute of Computer Science, kalle@sics.se

4 D15.3: STAGING OF PUBLIC PERFORMANCE, CITY AS THEATRE

'Day of the Figurines' was tested during the summer of 2005. The production was made by Blast Theory in collaboration with the Mixed Reality Lab at the University of Nottingham, Sony Net Services and the Fraunhofer Institute FIT. A test version was launched at Laban in London on 24th July and test-run until 18th August 2005. The game test showed that many of the central design features, including the text-based communication (SMS on mobile phones) and the very slow paced interaction, were successful. At the same time, the event uncovered a need for better game master support, something that now is investigated for the second phase tests. The ambition is to scale up the game to support approximately one thousand players.

Event	First public performance, Day of the Figurines
Produced by	WP12
Event took place in	London, U.K., July 14 th – August 18 th 2005
Number of participants	About 80 players
Available event documentation	Day of the figurine video, deliverables D12.2, D12.3 and D12.4.
Available from	http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36027275
Contact person	Matt Adams (Blast Theory), matt@blasttheory.co.uk

5 D15.EXTRA STAGING OF PUBLIC PERFORMANCE, EPIDEMIC MENACE

Finally, although no public performance was originally planned for WP8, the game Epidemic Menace was also tested during the summer of 2005. Epidemic Menace was staged in August 2005 with two teams of four players. The play test showed that the functionality offered by the multiple gaming interfaces was well-understood and suited to the different gaming devices. Players found all devices useful and necessary to pursue the goal of the game. Competition between teams and collaboration among team members turned out to have a strong impact on the experienced fun of the game. Players enjoyed outdoing their opponents and they liked planning and performing the next steps jointly with their team members. Overall, the game concept was approved by the players. They found it was a “new kind of game” as one player put it. They liked the mixture of story, movie, action, strategy, adventure, the diversity of devices and techniques to be used.

In a next step we are going to make the first game prototype more robust and flexible to be able to demonstrate small-scale versions of Epidemic Menace on fairs and trade shows. We are also planning to refine the gaming interfaces of Epidemic Menace based on the outcomes of the evaluation and we will integrate interactive television and further AR interfaces for the next play test.

Event	Epidemic Menace
Produced by	Crossmedia Showcase (WP8)
Event took place in	August 24-25, 2005
Number of participants	8 players
Available event documentation	Deliverable 8.5 Evaluation report, several pictures, a video reportage, ethnographic observations, ludographic questionnaires, log files
Available from	The video will soon be available at http://iperg.fit.fraunhofer.de . Currently, it is available at http://www.giga.de/index.php?storyid=127348 . The design document is available at: http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36234170 The evaluation report will soon be available at: http://fit-bscw.fit.fraunhofer.de/bscw/bscw.cgi/36234180
Contact person	Irma Lindt, FIT, irma.lindt@fit.fraunhofer.de

6 CONCLUSION

The demonstration activities during the first year of IPerG exceed plans and expectations. Originally, only two events were planned; a live role playing event arranged by WP11 and a performance arranged by WP12. Both of these were carried out and ahead of plan, the WP11 event in June 2005 and the WP12 event in August 2005. In addition, WP11 participated in an externally arranged event ('Prosopopeia) in July 2005 and WP8 also arranged an event in August 2005.

In addition, not only have the showcases produced 'packable and portable' game demonstrations, but also the research themes. WP6 and WP7 have both produced software demonstrations of infrastructure components and useful tools.