

FORETELL: Flood and Fire Safety Awareness in Virtual World



eTwinning Thematic Conference:
“Learning to Think in a Digital Society”

Athens, Greece, 28-30 September 2017

About the FORETELL project

The objectives:

1. Awareness of **good practices against floods and fires**, in a **safe and challenging** manner;
2. Exploit **experiential learning pedagogies** (e.g. ‘learning by doing’) in on-line interactive **3D virtual settings**;
3. Empower **teachers to adopt novel approaches** in their teaching;
4. Provide **open digital educational material** about flood and fire protection

The partners:

1. **Hellenic Open University (Project Coordinator):**
Development of the 3D virtual learning environments;
2. **University of Malta, Faculty of Education:**
Design of the educational games;
3. **Fire Safety and Civil Protection Directorate General of Bulgaria:** Development of the good practices scenarios & educational material;
4. **FELCOS Umbria, Italy:**
Implementation of the 3D VWLE in schools.

FORETELL Web Site

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Flood and Fire Safety Awareness in Virtual World

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FORETELL: Flood and Fire Safety Awareness in Virtual World

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- [Info day under FORETELL project, Burgas, Bulgaria 19-10-2016](#)
- [Second Meeting, FORETELL Project in Valletta, Malta 02-06-2016](#)
- [Foretell in the 11th primary school of Patras, Greece 06-05-2016](#)
- [Questionnaires 03-04-2016](#)
- [Kick-off Meeting](#)

The FORETELL project emerges from the need to promote a culture of safety in Europe against natural calamities, such as floods and fires.

<http://foretell.eap.gr>

The 3D VW Platform

- Open-source alternative of Second Life
- Self-hosting
- Possibility to operate behind firewalls, on the local network of the school
- 3D modeling 'in-world' to create/edit objects
- Scripting language to make objects interactive
- High quality graphics
- Customisable Avatars
- Import and backup of objects & virtual regions
- 'In-world' communication through Text or Voice
- Possibility to embed Moodle content in the 3D virtual world



<http://opensimulator.org>

Avatar Registration Home Web page

URL: <http://83.212.100.245:9000>

The screenshot shows the FORETELL website interface. The browser address bar displays the URL <http://83.212.100.245:9000>. The page features a header with the FORETELL logo and the text "Virtual world of Foretell project". A central banner image shows a 3D virtual world with flags and the FORETELL logo. Below the banner, statistics are displayed: "Users in World: 0", "Regions: 5", "Total Users: 15", and "Active Users (Last 30 Days): 9".

Annotations on the right side of the page include:

- Create new Avatar account**: Points to the "CREATE ACCOUNT" link in the "Main menu".
- User login to the portal & Password recovery**: Points to the "Login" section, which includes input fields for "FIRST NAME" and "LAST NAME", a "login" button, and a "forgot password" link.
- Links to FORETELL site, Moodle, FB**: Points to the "Links" section, which includes links for "Foretell Site", "Foretell Moodle", and "Facebook".
- Links to download the viewer**: Points to the "Viewers download" section, which includes links for "Firestorm", "Singularity", and "Kekua".

Annotations on the bottom of the page include:

- LoginURI of the 3D VWLE**: Points to the "LoginURI <http://83.212.100.245:9000>" link in the footer.
- Links to download the viewer**: Points to the "Terms of Service" link in the footer.

Footer text includes: "© 2017 Foretell Project - The European Commission support for the production of this website does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein." and "Web design © Foretell project. Distributed under Creative Commons."

“CREATE ACCOUNT” web form

Create new account

First Name: (*)
[Redacted]


Last Name: (*)
[Redacted]


Email:
[Redacted]

Password: (*)
[Redacted]

Retype password: (*)
[Redacted]

Type of avatar:

 Girl

 Boy

create

Pre-made
Avatars
to select

Recommended System Requirements

Opensimulator recommended viewers:	Firestorm, Singularity, Kokua
Operating system	Windows 7, Windows 8.1, Windows 10 (64 bit) (MacOS X and Linux are also supported)
Computer processor	2 GHz or better
Computer RAM	4 GB or more
Screen resolution	1024 x 768 pixels or higher
Graphics Cards for Windows or MacOS X	<ul style="list-style-type: none"> ● NVIDIA Graphics cards 9000 Series: 9600, 9800 200 Series: 275 GTX, 295 GTX ● ATI Graphics Cards 4000 Series: 4850, 4870, 4890 5000 Series: 5850, 5870, 5970
Internet connection	Broadband connection is required (Cable or DSL)

Viewer configuration: Menu 'Preferences'



Press CTRL + P

Add the FORETELL Grid

Preferences

Search Settings

General
Chat
Colors
Graphics
Sound & Media
Network & Files
Move & View
Notifications
Privacy
Advanced
User Interface
Skins
Crash Reports
Firestorm
Opensim
Backup

Grid Manager Miscellaneous

Add new grid

Clear Apply

Manage Grids

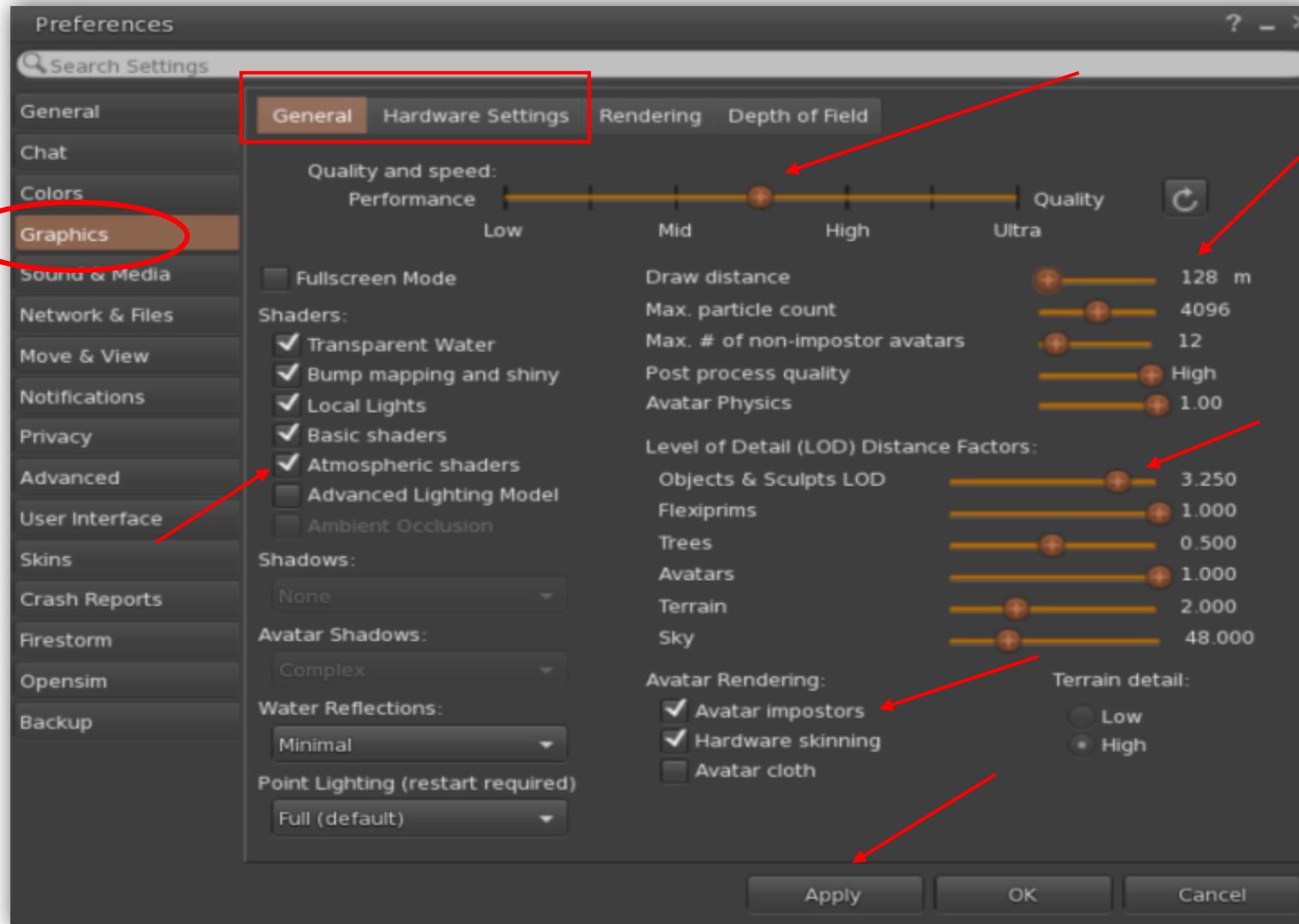
Grid name	Login URI
Avination	login.avination.com
AviWorlds	login.aviworlds.com:8002
Craft World	craft-world.org:8002
DigiWorldZ Grid	login.digiworldz.com:8002
FORETELL	127.0.0.1:9000
FORETELL	83.212.100.245:9000

Refresh
Remove

Grid Name: FORETELL
Grid URI: http://83.212.100.245:9000/
Login Page: http://83.212.100.245:9000/wifi/welcome.html
Helper URI:
Grid Website:
Grid Support:
Grid Registration: http://83.212.100.245:9000/wifi/user/account
Grid Password URI: http://83.212.100.245:9000/wifi/forgotpassword
Grid Search:
Grid Message URI:

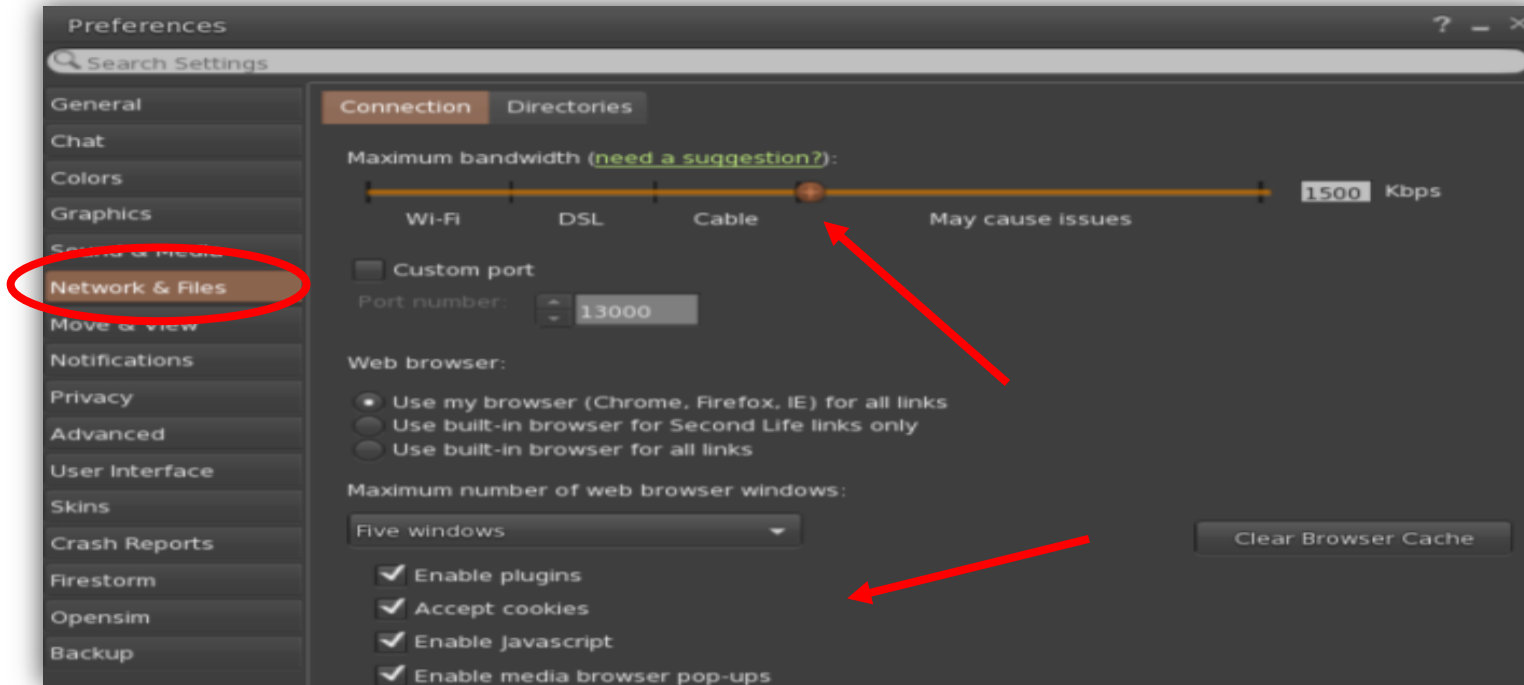
Apply OK Cancel

Configure the Graphics



In case of viewer lag:

- **Set Quality and Speed to Low**
- **Reduce Draw distance**
- **Disable Anisotropic Filtering and Antialiasing**
- **Disable Atmospheric shaders**



RECOMMENDATION:

Use the following **maximum settings** for bandwidth:

- Any type of **wireless** connection, including home wireless: **500**
- Hardwired **DSL**: **1000**
- Hardwired **cable** or better: **1500**

Login to the 3D VWLE of FORETELL

LOG IN

[Create an account](#)
[Forgot your username](#)

Username:

Foretell Admin

Password:

.....

Start at:

Home

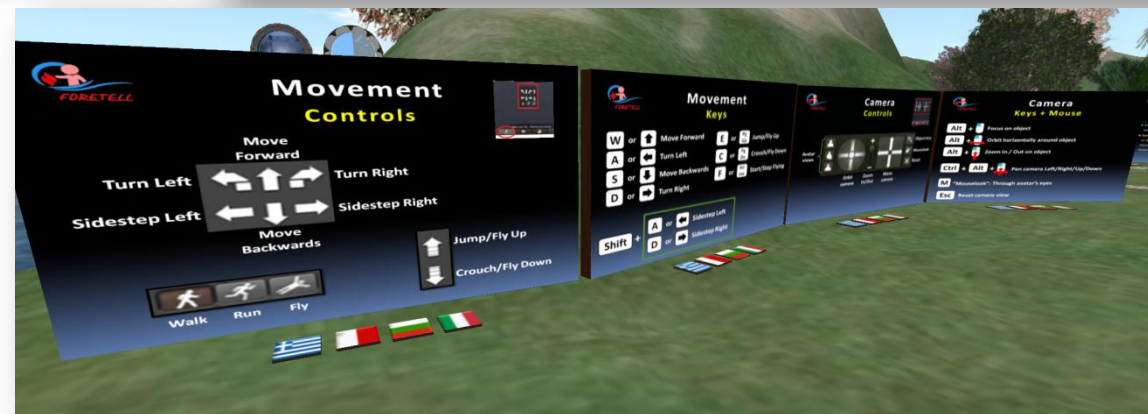
Log into Grid:

FORETELL

Log In

The Introductory Area of FORETELL

Demo video: <https://youtu.be/n4nB4Jo7RPw>



Configure the Environment

On the top of viewer's interface, open:

- Menu **“World”**,
Click on **“Environment Editor”** -> **“Environment Settings...”**,
Check the box **“Always use parcel/region settings”**,
Press **“OK”**.
- Menu **“World”**, click on **“Sun Position”** and check **“Estate Time”**.

Welcome 'in-world'!
Enjoy your visit!



The Narrative

- The **VW** is a **video game** to **train household robots** in regards to keeping humans safe from **flood and fire**.
- The **players** are the ‘**Trainee Operators**’, i.e. a **role-model** for robot behaviour.
- Players’ **actions** are **monitored** during their participation in the scenarios.
- The **players** receive their **mission** at the beginning of each scenario.

Scenario 1: Fire at Home

Demo video: <https://youtu.be/8mCkgCmKs0U>

- **Single-player.**
- Takes place entirely **within a house.**
- **Replicated in two (2)** independent houses.
- **Four sub-scenarios** that play out **randomly**:
 1. the player is asked to **identify potentially dangerous situations** that are set up in the house,
 2. carry out appropriate **actions to deal** with them,
- Success leads to the **second set of four sub-scenarios.**
- The new sub-scenarios **present a situation of fire.**
- The player moves through them **resolving each of the situations.**
- Upon **successful completion**, the player is **teleported back to the Quiz Area** to take a **quiz.**

Scenario 2: Flood at Home

Demo video: https://youtu.be/hO6nis8D7_E

- **Single-player.**
- Takes place entirely **within a house.**
- **Replicated in two (2)** independent houses.
- Consists of **three sub-scenarios** that are **triggered in succession:**
- The player is asked to:
 - 1. prepare a disaster backpack** with essential items found in the house,
 - 2. prepare the house** to leave it during the flood,
 - 3. get to the highest point** of the building when leaving is not an option.
- The player's **performance is evaluated three times**, once after each sub-scenario.
- The player **decides themselves** when they feel they have finished successfully.
- **Fail in a sub-scenario** leads to **teleporting back to the Introductory Area.**
- Upon **successful completion**, the player is **teleported back to the Quiz Area** to take a **quiz.**

Scenario 3: Fire Outside & Fire in School

Demo video: <https://youtu.be/XMv2Zf2EuzQ>

- **Single- or Multi-player.**
- Takes place on a **camping ground.**
- Consists of **three sub-scenarios** that are **triggered in succession.**
- The players are asked to:
 - **Find a safe place** for their tents and start a campfire,
 - **Wait on the correct safe spot** and **call for help** when the campfire gets out of hand,
 - Find their **way outside to safety** when the school is on fire.
- All sub-scenarios have a **time limit (5 min.)**
- The **timer is visible** to all players at all times.
- Players are **encouraged to chat** amongst themselves, **discuss**, and **help** each other.
- **All players fail** the scenario **if one fails to clear it in** within the time limit. They are then **teleported back to the Introductory Area.**
- **Upon successful completion**, all players are **teleported to the Quiz Area** to take a **quiz.**

Scenario 4: Flood Outside & Flood in School

Demo video: <https://youtu.be/HGX8eINE2Tc>

- **Single- or Multi-player.**
- Takes place on a **camping ground.**
- Consists of **two sub-scenarios** that are **triggered in succession.**
- The players are asked to:
 - **Wait on the correct safe place** and **call for help** in case the river is about to overflow,
 - Find a way to a **safe place** to avoid the flood in the building.
- All sub-scenarios have a **time limit (5 min.)**
- The **timer is visible** to all players at all times.
- Players are **encouraged to chat** amongst themselves, **discuss**, and **help** each other.
- **All players fail** the scenario if **one fails to clear it in** within the time limit. They are then **teleported back to the Introductory Area.**
- **Upon successful completion**, all players are **teleported to the Quiz Area** to take a **quiz.**

FORETELL Moodle site

URL: <http://foretell.eap.gr/moodle/>

Foretell Project Moodle

Navigation

- Home
 - My home
 - Site pages
 - My profile
 - My courses

Available courses

- Scenario #1 - Fire at Home**

The "Fire at Home" scenario is a **single-player** simulation that takes place entirely within a house. The scenario has four sub-scenarios that play out randomly in which the player is asked to identify potentially dangerous situations that are set up in the house and carry out appropriate actions to deal with them.
- Scenario #2 - Flood at Home**

The "Flood at Home" scenario is a **single-player** simulation that takes place entirely within a house. The scenario consists of three sub-scenarios in which the player is asked to:

 - (1) prepare a disaster backpack,
 - (2) prepare the house to leave it during the flood and
 - (3) get to the highest point in the building when leaving is not an option.
- Scenario #3 - Fire Outside & Fire in school**

The "Fire Outside & Fire in School" scenario can be **single-** or **multi-player** simulation that takes place on a camping ground and inside a school. Once the simulation has started, new players are not allowed to enter the region of the game. The scenario consists of three sub-scenarios in which the players need to:

 - (1) Find a safe place to place their tents and start the campfire,
 - (2) Wait on the correct safe spot and call for help when the campfire gets out of hand,
 - (3) Find their way outside to safety when the school is on fire.
- Scenario #4 - Flood Outside & in School**

The "Flood Outside & Flood in School" scenario can be single- or multi-player simulation that takes place on a camping ground and inside a school. Once the simulation has started, new players are not allowed to enter the region of the game. The scenario consists of two sub-scenarios in which the players need to:

 - (1) Find a safe place to wait and call for help in case the river is about to overflow,
 - (2) Find a way to a safe place to avoid the flood in the building.

Courses-Scenarios:

1. Fire at Home
2. Flood at Home
3. Fire Outside & Fire in School
4. Flood Outside & in School

Registration/Login to Moodle

You are not logged in

Foretell Project Moodle

Home ► Log in to the site

Log in

Username

Password

Remember username

[Forgotten your username or password?](#)

Cookies must be enabled in your browser [?](#)

Some courses may allow guest access

Is this your first time here?

Hi! For full access to courses you'll need to take a minute to create a new account for yourself on this web site. Each of the individual courses may also have a one-time "enrolment key", which you won't need until later. Here are the steps:

1. Fill out the [New Account](#) form with your details.
2. An email will be immediately sent to your email address.
3. Read your email, and click on the web link it contains.
4. Your account will be confirmed and you will be logged in.
5. Now, select the course you want to participate in.
6. If you are prompted for an "enrolment key" - use the one that your teacher has given you. This will "enrol" you in the course.
7. You can now access the full course. From now on you will only need to enter your personal username and password (in the form on this page) to log in and access any course you have enrolled in.

Enrollment in the courses-scenarios

Home ▶ Courses ▶ Miscellaneous ▶ F@H

Navigation

- Home
 - My home
 - Site pages
 - My profile
 - Current course
 - F@H**
 - Participants
 - Badges
 - Scenario 1: Fire at Home
 - Sub-Scenarios
 - Educational Material
 - Quiz
 - Courses

Administration

- Course administration
 - Enrol me in this course**

Scenario 1: Fire at Home

The **"Fire at Home"** scenario is a **single-player** simulation that takes place entirely within a house. The scenario has four sub-scenarios that play out randomly in which the player is asked to identify potentially dangerous situations that are set up in the house and carry out appropriate actions to deal with them. Upon successful completion of the first four sub-scenarios, the player will move to a new instance of the house for the second set of four sub-scenarios. Each of the new sub-scenarios follows directly from one of the previous sub-scenarios and simulates a fire incident. The player moves through them, resolving each of the fire situations. When the scenario ends successfully, the player teleports to the Quiz Area to take a small quiz.

This scenario has been duplicated in two (2) similar houses. There is no time constraint.

- News forum
- Sloodle presenter Scenario 1
- Sc#1 Sloodle controller

Sub-Scenarios

Sub-Scenario: Heater close to flammable material

In the living room of the house, there is a gas heater with an open flame and a teddy bear positioned directly in front of it. A small particle effect showing faint smoke is used to indicate to the player that this situation needs attention.

Sub-Scenario: Candle close to flammable material

Thank you !

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