



Engineering for the Universe Inside the Metaverse

Volume II Issue 2

May/June/July 2008

Studio Wikitecture

**crowd
sourcing
architectural
design**



also in this issue

The virtual job scene

Built environment HUD tour



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SCIENCE IN THE SEWER



When I saw the notice about the first science conference to be held in World of Warcraft, I was surprised but also intrigued and interested. Having attended many virtual conferences and training sessions, I was no stranger to using virtual worlds for this purpose. But World of Warcraft is a game; it is the game of choice for my 14-year-old son. Can someone have a serious conference in a game? A game played by teenagers?

As an engineer, I was definitely interested in the science component of this conference, and as someone who is exploring how virtual worlds will fit into our future careers and work environment, I knew I would have to attend. But choosing to begin an adventure in World of Warcraft, particularly in order to attend a science conference, was one of those paradigm shifts for me.

My first experience playing games on a computer was with a text-based adventure. Although at the time, the game was enjoyable and intriguing, I can't even begin to imagine the impression it would make on today's generation who have grown up with high-powered personal computers and high-end computer graphics. As games have evolved, I have tried a few such as Age of Empires along with the type that emulate "real" games such as solitaire, hearts, and mah-jongg. But at no time did I ever consider that a game could be used for something that was serious and work-related.

Well slap me silly and call me old-fashioned—was I ever wrong. Not only did I find out that science can be seriously discussed in nontraditional environments, but I experienced a new way of interacting with other professionals that was informative and entertaining, and for a fraction of the cost of a traditional conference.

The Convergence of the Real and the Virtual Conference, held May 9–11, 2008, covered a scientific discussion about virtual world research, interactions and comparisons between aspects of the real world and virtual worlds, and the future of virtual worlds. While some may think pursuing such research and discussion in a game is a waste of time, those attending realized that even though we were represented by digital images chosen by ourselves, we still remain real people and our interactions and behavior reflect that regardless of the environment in which we find ourselves.

And while the discussion was the heart of the event, I found that the preconference and post-session activities offered me unexpected opportunities and insight. Just getting to the conference was a journey in itself. The easiest step was purchasing the World of Warcraft software and signing up for a subscription. Choosing a character, or my digital persona, was a little more involved. Based on my son's advice I chose the Blood Elf Paladin and keeping in the spirit of the conference, named her Cloacina—Roman goddess of the sewers. Then I started the software, entered the World, and started on my way fighting monsters, training, traveling, gathering, and meeting people.

It didn't take me long to realize that I could accomplish tasks faster by teaming up with others. These in-game activities teach the player how to work together to achieve common goals. Is the lesson any different or less effective because it is being learned through the use of a game?

This lesson and the resulting feeling of camaraderie helped explain the reports I had read about younger professionals meeting in games like World of Warcraft instead of in more traditional locations such as golf courses. Other stories have indicated companies are hiring em-

ployees based on their roles and accomplishments in games like World of Warcraft. The game allows players to group together in guilds (the conference organizers set up a guild named "Science" for us to join). Because running a guild requires the guild leader to organize and manage group activities and resources, employers feel guild leaders acquire and exhibit the type of leadership skills necessary for the working world.

So after spending a couple weeks in the game preparing my character, the day arrived to journey on a zeppelin across the virtual landscape to the first conference event held in a large city known as Orgrimmar. Just navigating across these lands was an experience in itself. Travelers must use a map and, to avoid having to run everywhere, become familiar with available transportation systems.

The organizers also set up post-session activities emulating the type of events held at more traditional conferences. Each day after the regular session, the group traveled together on expeditions designed to help introduce us to other areas, cultures, and attractions within World of Warcraft. These included laboratories, memorials to the deceased, architectural features, and a musical performance. The last day included a wedding ceremony and a raid on an opposing faction's territory. Definitely not your normal conference activities, but fun, inspiring, and definitely a bonding/networking opportunity.

And although my participation in this event convinced me that yes, it is possible to host a serious event in a game, it was actually my youngest son who helped me realize another important point in all this. He, of course, took up playing World of Warcraft at the same time and ended up meeting another young boy from across the country. One day I came home and asked about his day. He told me he had played with his friend on World of Warcraft. I asked him what they had done thinking he would tell me what game-oriented tasks they achieved. Instead he told me how they had flown all over the World on the flight animals, went swimming in all the ponds and lakes they could find, and then played hide and go seek just as they would have if they had been playing together in real life. Leave it to kids to look beyond the original intent and purpose of an invention and find a completely unintended use. By following their open-minded example, I believe we can discover the numerous opportunities and life-changing experiences waiting for us within the emerging virtual worlds. ⚙️

For a more detailed account of the conference, see "[Slaying Monsters for Science](#)," written for *Science* magazine by John Bohannon, one of the conference organizers.

GRID WORKS COLLEGE EDITION IN DEVELOPMENT!

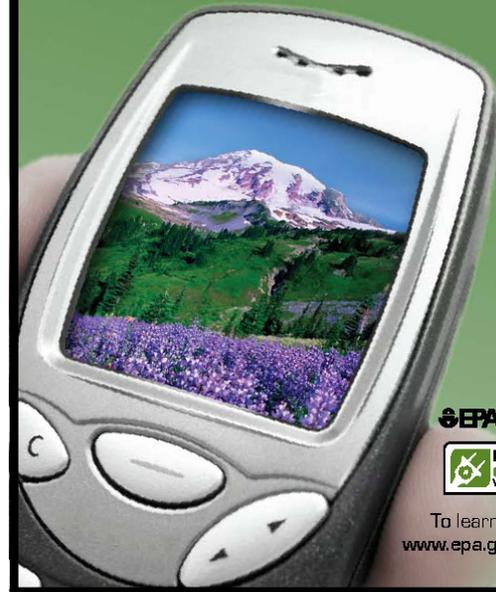
The next edition of Grid Works will feature colleges and universities in Second Life offering engineering and related science programs in real life and/or Second Life.

If you know of a school that should be included in this issue, let us know by e-mailing the following information to: civile@thegridworks.info

- Name and real life location of school
- Location of school in Second Life
- Second Life contact information for school

Go green. Recycle your cell phone. It's an easy call.

More than 100 million cell phones are no longer used. If we recycled all of them, we would save enough energy to power 194,000 U.S. homes for a year.



Grid Reports:

This section of Grid Works offers up the comments, opinions, or reports we receive from our readers.

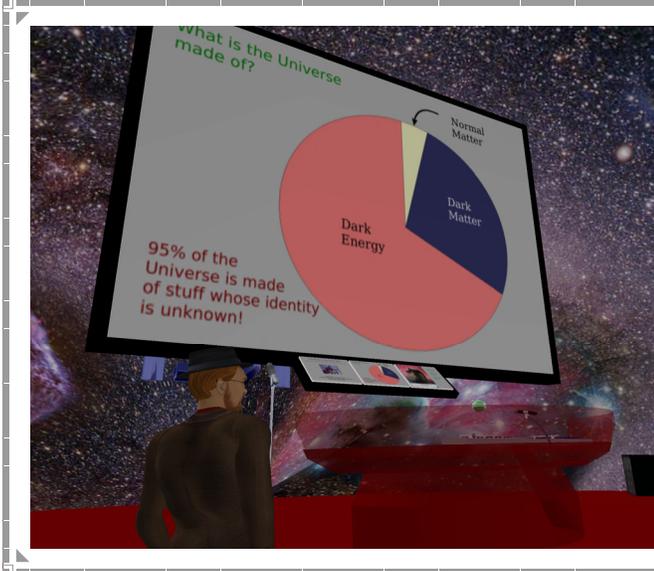
Schizo Computers in IT Lab – Jack McCarty, Clarendon College, on Virtualization

Clarendon College campuses in Clarendon, Pampa, and Childress, Texas are using virtualization on every system in our IT lab. We are looking into running a server-distributed solution for a virtual machine image for each of about 15 separate courses with all pertinent OSes included. Classes such as A+ classes would have availability to Linux and Mac VMs as well as Win9x, 2K, XP, and Vista to compare during lab work and instruction. I haven't found an Ubuntu image workaround for VMware on XP Pro host yet, but I think I will by mid-July when we need it. I haven't been successful with Virtual PC and Ubuntu, either. I also need a cheap version of Mac OS X to study, as well. Our networking and infrastructure class images need to use MS Server 2008 and 2003, as well as AS400, NetWare and Apple. As we are still in the development stage, I do not have enough licenses except for Microsoft OSes (MS has been VERY good to us here—think Dreamspark and MSDNAA). We have decent host hardware, but the challenges seem to be in the software realm. If we stay with Microsoft products, this is EASY, though we are hoping for some cross-platform operation as well.

"As we work through these lab settings, we are also setting the stage for our Enterprise as well, but that is another story. Dummy terminals and 'virtual bubbles' appear to be in our near future across the organization."

Serious Business

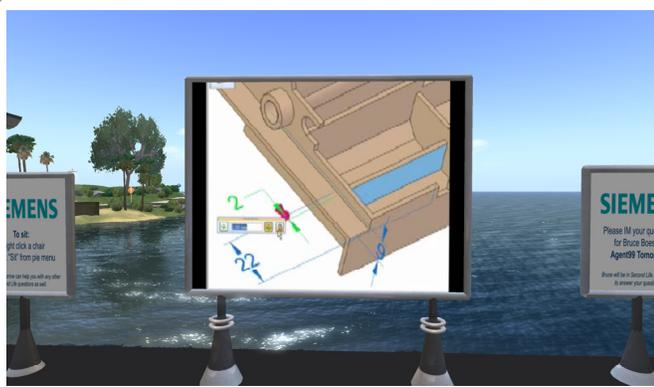
This month's photos highlight the types of regular events that residents of Second Life can attend at no cost. Covering topics ranging from astronomy to CAD, presentations in Second Life can deliver some pretty heavy stuff.



In April, a presentation titled "The Power of the Dark Side: How Dark Matter and Dark Energy dominate our Universe" was given by Dr. Rob Knop to an audience crowded into a globe decorated with images of space.



A health fair was hosted on the Dreams sim in April of this year. Many health-related organizations set up booths.



In May, Siemens PLM Software hosted a simulcast on their sim of their live presentation held in Boston.



In May on Explorer Island, NASA simulcast a Future Forum presentation held in real life in San Jose

To help celebrate Earth Day, Shannon Truss explained several do-it-yourself solar projects to a group of interested avatars.



In April, Clever Zebra, in partnership with Kelly Services, held a well-attended four-day business expo in the four-island Clever Zebra region.

Konected Club Job Openings

• Konected Hostess

Hostess of the club greets visitors, explains the use of the facility; Dance floor, VIP rooms and reinforces the club conduct code. Hostess arranges guest list for owner and sends out RSVP invitations for special events.

• Guest DJ

Guest DJ's perform on selected nights, can rent club for personal performances at owner's discretion. DJ's can add own entourage to guest list, also at owner's discretion. Must be able to perform all genre of music and provide own promotional materials.

• Konected Security

Security keeps the peace in the club and on Isle. Assists in the creation of guest list, can recommend club removal access, must have some form of a battle skilled HUD and/or special warrior like animations.

- All applicants must have prior work experience related to the role
- Good quality human form skin
- References upon request
- Roles will pay from \$200-\$700L per open nights (expect three standard nights), plus tips. Camping and freebies on the Isle will also be available to staff.

Studio Wikitecture



The virtual replica of the design concept will mirror the actual site development in Nepal, enabling collaborative participation throughout the life cycle of the facility.

TELE-ARCHITECTURE FOR NYAYA HEALTH: A COLLABORATIVE SOLUTION

In keeping with the collaborative spirit of the Open Architecture Network, this entry was created by an open and public community of over 25 contributors from around the world representing a wide range of disciplines and backgrounds.

While our community of contributors was very diverse and multi-disciplinary, one common characteristic is our collective passion for helping Nyaya Health realize its pragmatic goals for actually helping the people of this region. We are fully committed to helping to build, hands on, the most appropriate solution we can collectively assemble. While we are confident in the magnitude and accuracy of our research, this entry is not so much a proposed solution as much as it is an extension of our sincere desire to help, and an invitation to welcome Nyaya Health and the end-users of this facility into the ongoing design evolution. Instead of a 'top down' dictation of a design concept, we are inviting a more collaborative process, whereby many minds can work together, instead of a chosen few.

As an extension of our entry, we suggest the possibility of considering our team your 'tele-architecture' team, whereby the people who actually build and use this facility will be given access to a brilliant and diverse global community of members who are equally passionate about this cause.



SAMPLE OF DESIGN ELEMENTS:

Repetitive Building Systems

Vegetative Cooling

Creating a Public to Private Gradient

Facilitating Air Flow

Thermal Retention and Insulative Qualities

Possible Use of Gabion Walls

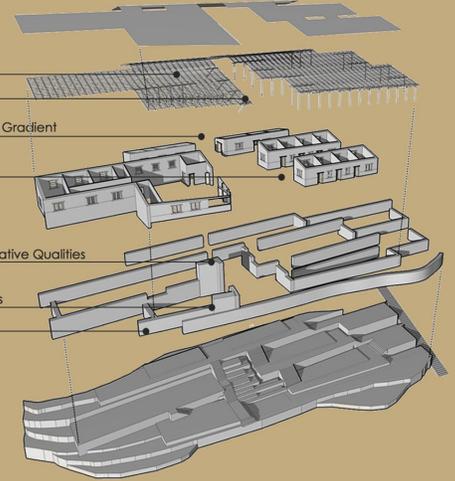
Seismic Considerations

Adaptability and Expandability Over Time

Louvers for Privacy

Demonstration Gardens

Limit Site Regrading



BASED ON THE COLLECTIVE PARTICIPATION OF A PUBLIC COMMUNITY DEDICATED TO THIS CAUSE, REACHING BEYOND THE EXTENT OF THIS COMPETITION

Ryan Schultz began to contemplate the application of crowd sourcing to architectural design after reading "Wisdom of Crowds," by James Surowiecki and "Wikinomics" by Don Tapscott and Anthony Williams. And when Schultz discovered Second Life (SL), a 3-D virtual world accessed through the Internet, he realized that the actual implementation of this open source approach to architecture could become a real possibility.

About this same time, Schultz came across Jon Brouchoud, an architect from Wisconsin, who was using Second Life to prototype and exhibit his home designs for clients. The two began corresponding through e-mails and discussing the design of a meeting place for the architectural meetings that were held in SL. From this resulting design collaboration, Brouchoud adopted the term, Wikitecture—the application of an open-source paradigm to the design and production of both real and virtual architecture and urban planning.

Through their work, the Studio Wikitecture project and related group was born. "Since that time, our group has been conducting experiments to work out the exact procedures and protocols necessary to harness a group's collective intelligence in designing ar-

chitecture," said Schultz. "In other words, in much the same way Wikipedia enables a loose, self-organizing network of contributors to collaborate on content creation, the Studio Wikitecture group has been using these experiments to work out the manner by which a group of geographical disperse individuals can come together to share ideas, edit the contributions of others, and to vote on the success or failure of proposed design iterations."

Collaborative Builds

The group's first project involved the design and virtual build of a meeting space, but was not a true representation of a collaborative effort in that the content created by an individual could not be edited or changed by another due to permission settings of objects. Describing the process of this first experiment, Schultz said each design submitted "was not a fully worked out design, but was instead like the early stages of any projects—a hand full of sketches and massing diagrams. In this sense, it was very much like how any type of project evolves in a typical AEC firm; from schematic sketches to more detailed drawing and models."

They also found that it was important for mem-

Crowd sourcing the architectural design process

bers to focus more on building community consensus with diagrammatic information rather than working individually on design details that would end up getting shot down by the rest of the community. At the end of the first trial, the group came away with an expected result: an interesting design with little overall coherency or unity.

The second experiment involved creating a build in which all group members would allow their objects to be changed or edited by others. A Flickr site was also set up by the group to allow those working on the project to upload photos of their designs with related information. The group used a type of archiving system in which all iterations were stored to allow for a return to a previous build upon the decision of group members. The resulting 3-D build illustrated a more unified and coherent design than that shown in the first experiment.

The Competition

With two experiments under their belt and a group of individuals dedicated to moving forward, Studio Wikitecture bumped their experiments up a notch and moved into round three. In an effort to provide a more sophisticated collaborative tool, the group teamed up with i3D, a Second Life-based company. i3D developed an in-world interface—the wiki-tree—to allow for building and archiving of Second Life models by group members. “The wiki-tree allows contributors either to submit their own design or modify the design of others, and like a 2-D wiki, all these evolving versions are saved in a archived history,” said Schultz. “Once a member saves their design iteration to the ‘tree,’ the submission, and any associated explanation that was included, becomes public for the rest of the contributing community to view. The group then votes on the submittal’s strength as a contribution. All votes are continually tabulated, and ultimately the most popular ideas advance as an integral part of the evolving design.”

The group also decided to use this experiment as an emulation of the philosophy behind the [Open Architecture Network](#)

(OAN), an online group with a mission of using open source architecture for humanitarian purposes. In pursuit of this effort,

the group began their third project with the goal of developing a submittal for a competition hosted by OAN that was aimed at providing solutions for building sustainable, multi-purpose, low-cost technology facilities for those who need them most. From a choice of sites in South American, Africa, and Asia, the Studio Wikitecture group chose to focus on the design of a medical facility in rural Nepal.

To facilitate further collaboration among members, the team set up a Web site, forum, and online wiki to allow the posting of research information, uploading of images, voting by members, and posting of comments related to the designs.

Shultz described the method by which contestants would have traditionally approached this type of contest. “The way competitions are traditionally run, and this was the case for the Open Architecture Network as well, is that after the host unveils the project, all the



Studio Wikitecture consisted of over 40 Second Life avatars who collaborated online to design this Nyaya Telemedicine Center entry.

Growing the Wiki-Tree

The wiki-tree was developed by i3D for the Studio Wikitecture group to facilitate the collaborative design process. And because land in Second Life can only support a limited number of objects or prims, the wiki-tree also serves the function of keeping prim count low.

So how does the wiki-tree work? Using the wiki-tree, an avatar rezzes a prim, creates a build, and then takes the objects into their inventory. This design is submitted to the tree by dragging it from a user’s inventory into the tree. This submittal process results in a leaf appearing above the tree trunk. With this interface, any member can work on a build by touching a leaf to rez that particular design and modify it before placing it back into the wiki-tree and creating a new leaf. Voting buttons on the tree allow members to decide on which leaves need to be pruned or if a design should be returned to a previous iteration. And branches on the tree indicate the relationships between individual designs.

Some basic principles behind the design and presentation of the tree are:

- The proximity of one leaf to the next indicates that the designs contained within are very similar derivatives of each other.
- The color of the leafy boxes represent the number of votes the community has given the design contained within. The more green a leaf, the more votes; yellow has less and red, the least. The top ranked design at any one time is called “the trunk” and takes on a bark texture.
- Each user can vote on each design held within the tree.
- The interface allows users to leave textual comments in the way of threaded discussions that are sent to the Studio Wikitecture Web site. Snapshots of designs can also be taken and submitted to the Web site in this manner.

Because the wiki-tree is a prototype, the user interface can be a little cumbersome for a new user. “For the first couple weeks we spent a lot of time giving demonstrations and walking people through the steps required to submit their designs to the tree,” said Schultz.

There is also the lack of an export tool for saving a Second Life design or build in a format that could later be used by a CAD or drawing program. At this time, users can only take high resolution photos of their creations and save them in bitmap format.

The group would like to introduce the wiki-tree to the rest of the virtual community. However, the current wiki-tree can only be used on one project and on one parcel at a time. “For our next stage of development, pending funding of course, we are planning to enable the wiki-tree so that it could work on multiple sites throughout Second Life,” said Schultz.

Schultz sees other groups in Second Life using the wiki-tree to form a consensus around the projects they build on group-owned land. “I would imagine the way a lot of groups work is that group-owned land is divided up and doled out to individuals of the group, and although there is oftentimes a covenant, people usually build whatever they want. The end result is often a hodgepodge of stuff with no unifying structure or theme running throughout the properties. The Wikitecture system, in this sense, could take the place of the group’s arbitrary covenant—a covenant that is able to adjust itself to the community’s values on a more localized level.”

And Schultz also suggests that the technology is not just limited to architecture. “In a place like Second Life, where companies are looking for ways to engage their consumers, this tool could provide the opportunity to invite end-users into the design process, perhaps even inverting the cycle of development altogether.”

FEATURE STORY

different entrants go to their separate corner and work out their individual designs in relative isolation. The problem, however, since only one entry can really win, a lot of the good ideas offered up in the other entries, are either not incorporated in the final design or they are incorporated, but without recognizing the original author. Either way, this is both unfair and inefficient."

In contrast, the Studio Wikitecture group was able to develop their entry in a more public and open fashion. "The goal was to create a unified entry for the competition that was created through the collaboration of many contributors. The benefit of this approach is that we were able to pool all of the great ideas each of us had, and create a 'super-entry,' if you will, that is the product of a large collaborative team."

The group held their kick-off meeting in the fall of 2007, set up a build site on land donated by KK Jewell of arcSPACE, and by the end of February 2008, the team had their design finalized and accepted by OAN. The final result: out of 263 qualified entries representing the work of 849 design team members from 57 nations, a jury awarded the Studio Wikitecture group's design a Founder's Award along with third place in the Asia Challenge portion of the competition.

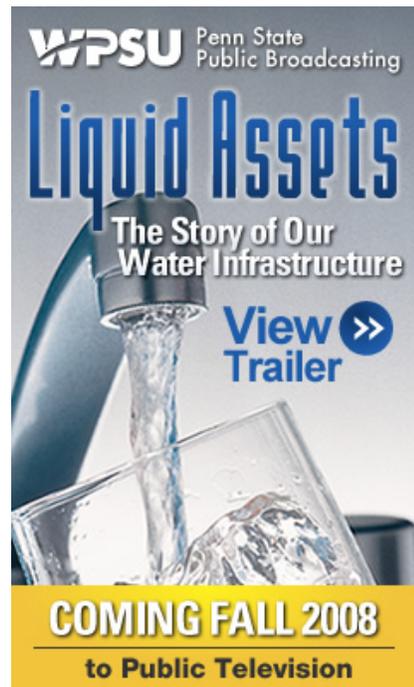
Wikitecture and design/build

Jon Brouchoud, architect and co-founder of Studio Wikitecture, pointed out at one of his presentations this year that bringing more heads together sooner allows problems to be vetted earlier in the design process ultimately leading to cheaper and more efficient processes altogether. And technologies that aid in the adoption of this approach can help the building industry better cope with increasing economic challenges. "From the search for the cheapest bid to the shortage of licensed professionals, these market pressures will play a significant role in defining the value of an integrated and decentralized model," said Schultz.

The use of the Studio Wikitecture technology can aid in this process by allowing for contributions from semi-professionals to professionals in adjacent professions. "This might develop into alternative internship programs or alternative paths for individuals to become licensed as engineering, architectural, and other building professionals," said Schultz. "Licensure could evolve into a gradient of licensing where instead of being such a black and white determination of whether you are qualified or not, a more realistic gradient of rankings could be established such as architect 1, 2, or 3 or engineer 1, 2, or 3."

Schultz added that this collaborative approach would also offer a more open platform for involving suppliers and vendors earlier on in the design process. "They become more of a partner in the process than an end-game supplier." This method also allows clients and the public to become involved at a very early stage offering opportunities for them to contribute significantly to the project design even if they do not have a technical background. In this manner, all stakeholders are able to view and interact with a design before any money is spent on building materials or equipment. With tools like Studio Wikitecture, today's public hearings may become tomorrow's virtual walkthroughs. ⚙️

With tools like Studio Wikitecture, today's public hearings may become tomorrow's virtual walkthroughs.



NOW IT COMES WITH A LIST OF INGREDIENTS.



What's in your tap water besides water? A short new report from your water supplier will tell you where your water comes from, what's in it, and how safe it is. Look for the report in your mail, and read it. Because when it comes to understanding your drinking water, the most important ingredient is you.



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The Studio Wikitecture Team

The third Studio Wikitecture project resulted in 50 different design contributions left by an average of about eight dedicated contributors. "As with Wikipedia or any other type of open source project, some people were diehards - in there every day making suggestions and tweaking the design, but the majority of participants only made one or two contributions throughout the entire design duration," said Schultz. "Ironically, however, it was the ideas from these infrequent contributors that had the most impact on the overall gestalt or theme of the final design."

One example of a change proposed by a sporadic contributor involved the idea of separating the more private residences from the public areas by moving the residences further up the hill with an outdoor courtyard and trellis system used as an intermediate buffer. "This contribution was quickly embraced by the community as a key idea to develop further in the design."

Schultz pointed out that another revealing characteristic of this experiment was the interplay between vertical thinkers on one end and horizontal thinkers on the other. "What was key to this open collaboration is that more horizontal, design oriented thinkers were able to incorporate this very crucial and specific information more holistically in the overall design. Or in other words, were able to synthesize these ideas with other competing factors into a more holistic design. Both the horizontal and vertical perspectives were crucial in creating a final design that addressed as many issues as possible." 

Photo of the Studio Wikitecture Team: (Second Life Names in parentheses): First Row - Ethos Erlanger, Chip Poutine, Jon Bouchoud (Keystone Bouchard), Roger Wellington (Omei Turnbull); Second Row - Ryan Schultz (Theory Shaw), Jacob Sullivan (Navillus Batra), Michael DiTullio (Far Link), Roberto Carretero - Philadelphia, PA (Otrober Breda); Third Row - Scott C. Chase (Scooter Gaudio), Tony Bundy (Anthony Reisman), (Jo Newell), Simone Riccardi (Turboy Runo)

**AT LEAST ONE IN FOUR BUSINESSES
NEVER REOPEN AFTER A DISASTER.**

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THE BUILT ENVIRONMENT

A Grid Tour Across Second Life

Following is a guided tour through Second Life for people new to the virtual built environment. Starting on the Public Works sim, the tour will take you across many islands and buildings that illustrate what people are doing and have achieved in Second Life, relevant to the real world built environment. The tour finishes at Second Life's most famous pub, the Blarney Stone set in Dublin, for a welcomed glass or two. And, if you get the Second Life bug, then a location offering guidance for creating and developing within Second Life is added as your final stop.

This tour is available as a tour HUD from the isite or Grid Works offices on the Public Works sim. Just look for the "BUILT ENVIRONMENT IN SL TOUR HUD."



isite office

[http://slurl.com/secondlife/
Public%20Works/71/35/31](http://slurl.com/secondlife/Public%20Works/71/35/31)

<http://tinyurl.com/4neccr>

Home of isite and fairsnape—a meeting place for discussions on built environment sustainability, resilience, and futures. Feel free to use the familiar meeting facility for your meetings.

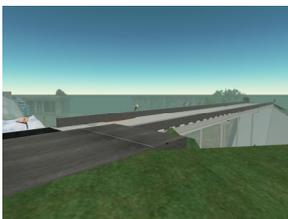


International Eco Code Home

[http://slurl.com/secondlife/
Public%20Works/210/43/30](http://slurl.com/secondlife/Public%20Works/210/43/30)

<http://tinyurl.com/3zdnzh>

Public works code house and future homes. Sim managers plan to host a number of homes that illustrate the numerous eco and build codes from across the real world.



Bridge Tour

[http://slurl.com/secondlife/
Public%20Works/123/177/33](http://slurl.com/secondlife/Public%20Works/123/177/33)

<http://tinyurl.com/3ngg3v>

This fantastic, interactive, but effectively simple build of TEEX Clary at TEEX. Taking the tour is a must to understand how Second Life can really be used as an educational tool.



Center for Facilities Management

[http://slurl.com/secondlife/
Manchester%20UK/12/37/24](http://slurl.com/secondlife/Manchester%20UK/12/37/24)

<http://tinyurl.com/5y4873>

Home to the research-based CFM. Regular research meetings are held here with delegates from across the real facilities management world. Click through previous presentations and visit the Manchester locations of Urbis and Arena.



Commonsense for Progressive Organisations

[http://slurl.com/secondlife/
Commonwealth%
20Island/89/123/669](http://slurl.com/secondlife/Commonwealth%20Island/89/123/669)

<http://tinyurl.com/4scjgd>

A sim dedicated to understanding existing and renewable energies. Visitors land on a compass and are presented with four directions to explore that illustrate the problems and opportunities we face on energy choice. This is a real learning and awareness project and the dedicated work of Bjerker Eerie.



Botanical Gardens

[http://slurl.com/secondlife/The%
20Botanical%
20Gardens/67/57/22](http://slurl.com/secondlife/The%20Botanical%20Gardens/67/57/22)

<http://tinyurl.com/4tulhn>

Time to take a rest in this wonderful and natural build. Take a walk through the gardens or sit and be inspired.

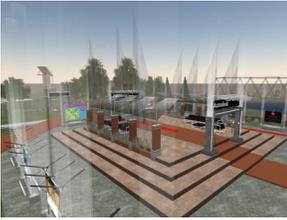


Etopia

[http://slurl.com/secondlife/
Etopia%20Prime/201/37/36](http://slurl.com/secondlife/Etopia%20Prime/201/37/36)

<http://tinyurl.com/3ke94a>

Eco store—be inspired with all the green stores and outlets in this pleasant, ocean-side mall. There is a nice coffee shop and good photographic stores. Take a look around and support those trying to increase green home products and services through Second Life. Oh, and get a cool, free bamboo bike to get around on.



Home of Autodesk in Second Life

<http://slurl.com/secondlife/Autodesk/118/118/23>
<http://tinyurl.com/3odj2v>

Much to see and learn about Autodesk's real and virtual world projects and products.



Home of Reuters

<http://slurl.com/secondlife/Thomson%20Reuters/126/100/25>
<http://tinyurl.com/4yqduz>

Reuters office build, modelled on the London office and home to in-world reporters. Have a chat in the reception area, take a look around the building, and keep up-to-date with real and Second Life breaking news.



Manpower

<http://slurl.com/secondlife/Manpower%20HQ/62/149/25>
<http://tinyurl.com/4qcsez>

Corporate support organisation for those seeking work or already working within Second Life. Explore the numerous possibilities of real work within a virtual environment.



Blarney Stone

<http://slurl.com/secondlife/Dublin/80/80/25>
<http://tinyurl.com/44zjuh>

Take a look around the true-to-real life Dublin within Second Life and finish with a Guinness, a good chat (craic), and maybe some live music streamed in from pubs in London or Dublin at the Blarney Stone.



Learning at the Library of Prims

<http://slurl.com/secondlife/Natoma/210/163/27>
<http://tinyurl.com/3kakpe>

Now you are so inspired, wanting to learn more on creating, building, and developing within Second Life, so check out and sign up for the excellent and structured building tutorials here at the Library of Prims. ⚙️

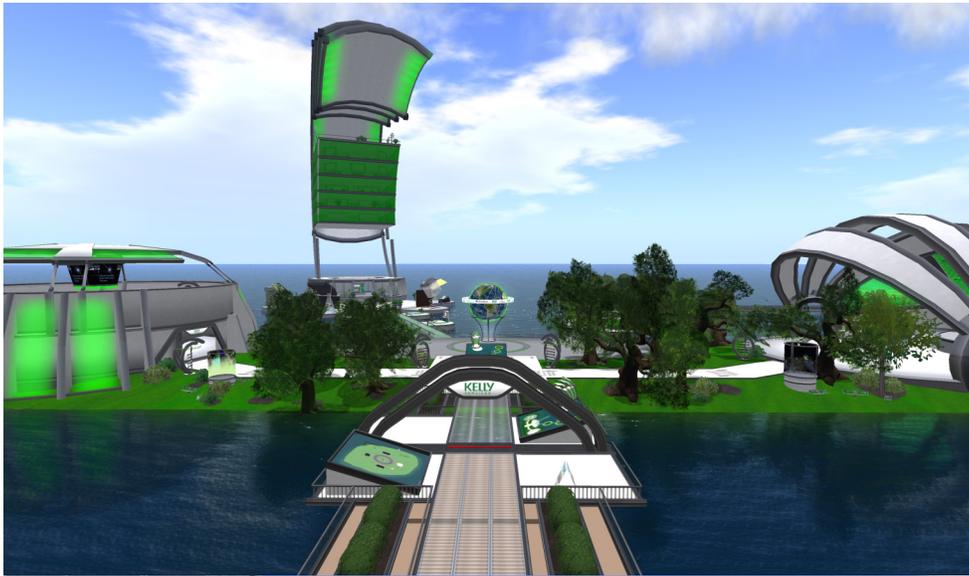
MANHOLE SIZING KIT

Available in Second Life on Public Works Island

Kit contains manholes with inside diameters ranging from 2 feet to 8 feet. Additional kit available with reinforced concrete pipes with diameters of 12 inches to 72 inches. All built to industry standards.

NEVER REACH FOR THAT PEN AND PAPER AGAIN!





The Virtual Job Hunt

From virtual job fairs accessed through Web sites to 3-D facilities constructed in virtual worlds such as Second Life, job seekers are finding interactive and rewarding paths to follow for securing employment. And well-established companies in the employment services industry are helping to blaze the trail. Within the last year, Manpower Inc., Kelly Services, and CareerBuilder established virtual spaces in Second Life that offer employment resources and job information.

Companies are beginning to realize attracting new talent means sharing the same online spaces. "The use of virtual worlds as a business operations tool is rapidly changing the way business is done," said Dave Fenech, senior director of eBusiness at Kelly Services. "As the virtual world continues to evolve, benefits will quickly move beyond the marketing, branding, and customer relationship enhancements. Early adopters of virtual technology can secure a lasting productivity advantage through enhanced collaboration, team building, and enterprise-wide innovation."

Kelly Services, headquartered in Troy, Mich., has been providing staffing solutions for over 60 years. Today the company operates in 33 countries and territories helping to facilitate employment for over 750,000 people each year in many different industries. Last year, the company set up virtual headquarters in Second Life on a group of three islands and was one of the first companies to place a Second Life resident in a real life job.

One of the islands owned by Kelly Services emulates an online game on their Web site (<http://www.findfrankajob.com/>). Another island serves as a sandbox, and the third island hosts the company's virtual headquarters, a concert hall, an expo center, a stadium, and central hub. Throughout the year, Kelly Services hosts seminars, conferences, job fairs, interviews, and training.

Other features, set up near the headquarters building, include scenes representing several real-world jobs in nursing, office work, information technology, and laboratory work. Each scene is set up to animate three different tasks; by working at these tasks for 15 minutes, avatars receive a gift related to that job. As more time is spent working, avatars are "promoted" and given additional items. Each scene distributes a total of four gifts related to that particular job.

Four job boards are also located near the headquarters with listings of jobs in the healthcare, information technology, science, and office services industries. Available positions include specimen processors, chemist, support engineer, and medical billing/

administration staff located in cities around the world such as Buffalo, N.Y., Baton Rouge, La., and London. Each listing has a link to a Web site detailing more job information, salaries, and hours.

Kelly Services supports the company's virtual build with a Web site at <http://www.kellysecondlife.com>. Staffing services are even provided for companies operating in virtual worlds. Virtual establishments searching for employees can fill out a form on the site requesting help in filling job vacancies. Kelly Services will hire and train employees for these positions on a temporary, part-time, or permanent basis.

Manpower, like Kelly Services, was founded in the upper Midwest more than 60 years ago, and like Kelly Services, this company established a virtual presence last year on an island in Second Life. The company's island, Manpower HQ, hosts an auditorium, orientation trail, Holiday Island, and a main building with a lounge, executive office, and lobby. In the lobby, avatars can obtain information on virtual work, defined by Manpower as work done outside of the traditional physical office or work space, and can pick up some tips for customizing their avatar and purchasing proper clothes for an interview.

CareerBuilder Inc., the new kid on the employment services block, was established in 1995 under the name NetStart Inc. In 1998, the company assumed its present title and launched a Web site at CareerBuilder.com. With its background firmly established in the beginnings of the Web, CareerBuilder wasted no time in jumping into the virtual world environment. "CareerBuilder entered Second Life just about one year ago for a three month pilot test with kiosks throughout Second Life," said Ellen Miehle, senior affiliate marketing manager for CareerBuilder.com.

Because this test proved to be successful for the company, a larger site was set up along a dock area on an island owned by Second Marketing LLC—the developer of the CareerBuilder.com Second Life strategy, kiosks, and venue. "Visitors seem to really appreciate our presence in Second Life," said Miehle. "We have had thousands of people click over to our Web site from the 50 kiosks spread throughout Second Life."

A large computer laptop sits on the dock area and serves as a stage for events sponsored by CareerBuilder. There is also a lounge area with a big screen TV hosting shows from SLCN.TV, and off to the side, a private office area used for interviews. Miehle also indicated how much the Second Life residents enjoyed the camping jobs hosted by CareerBuilder on the dock. "All of the custom 'camping jobs' at our venue are always filled. People enjoy them much more than just sitting on a camping pad."

Miehle believes that virtual worlds will play a larger part in all Web-based activities in the not too distant future. And she indicated how important it was for employment-based services to have a Second Life presence. "Right now, Second Life has a population that is ahead of the curve and filled with early adopters and tech-savvy people. We believe, as do many other companies who recruit in Second Life, that the very nature of the Second Life residents makes them very desirable job candidates." 

Kelly Services has set up a virtual emulation in Second Life of their 2-D online Web site: Find Frank a Job (<http://www.findfrankajob.com>).

"The use of virtual worlds as a business operations tool is rapidly changing the way business is done," said Dave Fenech, senior director of eBusiness at Kelly Services.



The Virtual Job Scene

As Second Life develops into a serious place in which to do business, its residents are setting new work-related rules and modifying existing business practices in order to adapt to the new environment. Businesses using the virtual environment to recruit employees are developing policies regarding distribution of company information, application submittals, and interview sessions. Job applicants are trying to figure out the best job posting sites and what they should wear to a virtual interview.

Ingrid Ciscosystems, a consulting job recruiter from Manpower who is dedicated to recruiting for client Cisco Systems and has been recruiting in Second Life for about a year, offered some advice for companies considering the use of Second Life to find employees: "A company cannot jump right in here and think they are going to be able to recruit—no one is having consistently successful results. The key is to go to areas where employment agencies have set up recruiting sites."

Visiting established job-related sites will help a company determine the look and feel of what is to be expected. Ingrid Ciscosystems pointed out that sometimes companies make the mistake when hosting a job fair of trying to make their site look too cool or futuristic. "This does not give people the feeling that this is a real company or a real job fair. It also distracts from the purpose of trying to make a professional connection with a candidate. A lot of companies are still struggling to change people's perceptions that this is only a game and to ensure that the candidate realizes the company is serious about hiring that individual."

So with recruiting in Second Life still so new, why would a company want to seriously consider using it to find future employees? Ingrid Cisco-Systems said, "The need to cut down on business travel costs and widen the candidate pool is a big interest factor. We have been optimistic at recruiting in the United Kingdom because there are so many users of Second Life in that country."

As for the recruiting process, companies are working to develop standards for the virtual environment. "When I first meet a candidate, I ask for their resume and then pre-screen them in real life," said Ingrid Ciscosystems. "Then I offer them a virtual tour of the Cisco campus. During the tour, I will point out areas where they can learn more about Cisco products and the company so they are better prepared for the face-to-face, real life interview."

Cisco has the option to conduct interviews in person or through TelePresence which is similar to teleconferencing, but other companies are handling interviews in Second Life differently. TMP Worldwide Advertising & Communications, an independent recruitment advertising agency, set up TMP Island in Second Life as a space in which recruiters can network with potential candidates, host events, conduct employee presentations, or build virtual replicas of the company's buildings. Last August, TMP Worldwide hosted a recruiting event over a three-day period. Interested job candidates who submitted applications prior to the event were assigned meeting times with companies. Applicants also received instructions and training on how to interact within Second Life. For example, some companies require those being interviewed to only show up in human form. Participating companies included Accenture, EMC², GE Money, and U.S. Cellular, and the virtual builds for these companies were left in place on the island so candidates could continue to drop off their resumes. 



TMP Worldwide Advertising & Communications has set up a sim offering recruiting space for real life companies.



Job boards on the Kelly Services sim regularly broadcast open job positions in several countries in four different industries.

VIRTUAL JOB FAIRS



While virtual job hunting in 3-D worlds may be considered an emerging trend, virtual job fairs hosted on Web sites are happening on a regular basis. Recently [Building](#), a U.K.-based publication, sponsored Building Virtual Careers 2008—a two-day event held completely through a Web site. The event targeted consultants, contractors, and house builders; registration was free through the magazine's Web site and participation open to anyone across the world with an Internet connection. The site was organized into three main areas: an auditorium where visitors could attend seminars, a lounge that offered networking opportunities, and the convention center where each prospective employer hosted a virtual space. Those interested in a particular company could "enter" into an area by clicking on the company's virtual booth, and then chat with company representatives.

Job Hunting in 3-D

Over the last year, job fairs have also started showing up in virtual worlds such as Second Life. Last November, [Gax Technologies](#) hosted a virtual job fair that brought together more than 1500 job-seekers from 45 countries and 20 prestigious head-hunting and recruiting firms. The Luxembourg-based IT company set up the Working Worlds job fair in the 3-D virtual world of Second Life (SL) to help attract qualified personnel to available jobs in the financial and services sectors in Luxembourg. Throughout a 13-hour period, candidates were able to visit company booths, meet with recruiters, and attend presentations, all in the virtual world of Second Life.

With 30% of the registrants from France, 11% from the U.K., 9% from Poland, and 8% from Belgium, the virtual setting facilitated the ability for those attending to participate in interviews. "This new form of virtual recruitment gives international professionals unparalleled access to Luxembourg, which has some of Europe's highest wage levels and favorable taxation rates, combined with a growing need to add to its skilled workforce," said Cornelia den Hartog, managing director of GAX Technologies.

The success of this first job fair, which resulted in 300 interviews and the filling of at least 50 positions, convinced Gax Technologies to host another event, the Benelux Career Fair, in May of this year. This event showcased the largest employers located in Belgium, the Netherlands, and the Grand Duchy of Luxembourg.

A third job fair is scheduled for November 27, 2008, and will run from 10 a.m. to 9 p.m. (GMT+1). Companies interested in participating can choose from one of three packages:

- **Presence Package:** a billboard presence on the Working Worlds islands with a link to the company's Web site.
- **Participating Package:** a stand in the "Business Center" with furniture and publicity space for the company's use for a period of one year.
- **Sponsor Package:** a new, customized building is placed on the island for the company's use for a period of one year.

With the last package, the Working Worlds Web site indicates that "everything is possible—an office in the form of your logo, an exact copy of the building you are actually working in, or a glass tower with a golden cap."

Because the Working Worlds virtual site is available 24/7, 365 days a year, company representatives and job seekers can check out the event area anytime by signing up for a free Second Life account, downloading and launching the Second Life software, and teleporting to the Working Worlds extensive and colorful, four-sim area. Several companies, including [Kaupthing Bank](#) and [Lombard](#), have already established a virtual setting on the sims. Gax Technologies also has an office there, along with a set of buildings offering job postings in specific industries such as IT and finance.

Governments Looking Online

Like private business, government agencies have experienced the same challenges of finding qualified candidates. And over the last year, two agencies in particular have taken advantage of the 3-D interface of Second Life to offer job-related information with the intent of attracting job candidates. Missouri State has been involved in Second Life for over a year and has hosted at least two job fairs, the last being held in June of this year. [Ontario Public Service](#) recently launched their own island, OPS Careers, in Second Life to introduce their workplace and available job openings to potential job candidates. Those teleporting to the island will arrive in the OPS Welcome Center—an area with displays about various positions available throughout the organization.

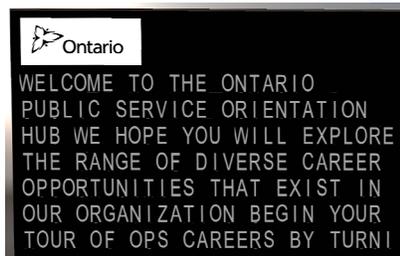
FEATURE STORY

Those wanting more in-depth knowledge can travel around the island to regions set up with job-specific displays. Health sector jobs are represented with a building that houses rooms for interviewing and a room that illustrates the CPR method.

A fire-fighting display is set up outside between the health building and the welcome center, and a traffic media building is located in the southwest corner of the sim. Visitors to this area can watch a simulation of video screens that monitor traffic conditions throughout Ontario.

The center of the island hosts an airport runway and hangar. The water testing lab, located in the northeast corner of the island, has an activity that can be completed to give those interested a better idea of the type of work involved in this sector. Avatars wear a "Water Sample HUD" that attaches a water bottle to their hand. Then the visitor must leave the lab, collect a sample in a nearby body of water, and then bring the sample back to the lab and test the sample by clicking on the water testing machine. Results of the sample are then reported.

Finally, back in the welcome center, visitors can access kiosks for specific job information in 18 categories, pick up some free gifts, and watch job-related videos. ⚙️



REAL LIFE OR SECOND LIFE JOB?

Recruiters are not only filling job positions in real life, they are also recruiting for virtual jobs in worlds like Second Life (SL). "Every day there is a huge listing of jobs, and candidates can go to places like Kelly Services to see the listing of virtual job opportunities—just like someone would do in real life," said Ingrid Ciscosystems, job recruiter for Manpower. During her personal time in SL she offers in-world only recruiting services to residents under avatar Prissy Price.

But those thinking about taking a full-time or even a part-time job in Second Life should be aware that this environment is a 24/7 community. With companies serving a population spread across all time zones. Each job applicant must make sure that they are able to commit to the hours required. "If someone is serious about a full-time job or a real job, they should go to a place like Manpower, otherwise, if all they want is to make a quick Linden dollar with minimum to no real life commitment they should just consider the many camping options available on various sims." Also, job hunters need to know that working a job in the virtual world might not yet bring in enough income to support someone. In other words, "don't quit your day job," said Ingrid Ciscosystems. ⚙️

FOCUS ON BUSINESS PROFESSIONALS IN SL: PRISSY PRICE

Prissy Price co-owns an employment agency, HNC—The Human Network Connection, with two partners, Laila Tomorrow and Antionette Andrews. This agency offers in-world career opportunities to earn Lindens, and offices are available for rent in their virtual building. Those interested can contact the partners to receive a job application or visit the office to view current listings. The agency also provides consulting services on interviewing in Second Life and can provide recommendations on where to get professional attire for your interview. The HNC Headquarters is located at <http://slurl.com/secondlife/Infotainment%20Island/136/209/31>.

Price, an avid networker in real life, has also created a prestigious group of professionals in the social networking tool, LinkedIn, called the "Professional Second Lifers." Membership has grown in five months to 300. She is currently in the process of finishing a sim that will be a place for members to meet, greet, or just have some fun downtime in Second Life. The sim, Price Isle, will house Konected, a private social dance club, and Flaunt, a shopping mall, in an exotic, tropical atmosphere with zone camping. Price is currently interviewing to fill positions available in her club and is expecting

to have a grand opening of the club towards the end of July or August. Price Isle is open now at <http://slurl.com/secondlife/Mackinac%20Island/35/144/41>.

Price also has a group of condos for rent called "Konected Condos." The building has four units available, each offering 50 prims, two-bedrooms, living room, kitchen space, and large balcony with amazing sunsets overlooking a tranquil park with swimmable waterfalls. And all are in walking distance to the Konected Private Social Dance Club and Flaunt Mall on Price Isle. A hidden gazebo and private camping area cave are also available to residents. Rental terms are a weekly rental price of \$500L with rental durations ranging from a minimum of one week to a maximum of eight weeks. Prissy Price can be contacted in-world or at prissyprice@yahoo.com. ⚙️





Ever heard of TED?—no, it's not the guy who works up on the third floor nor is TED a corporate code word made up to distract people from thinking about their current operating system. TED is a conference and a movement. Started in 1984 with the goal of bringing people from the worlds of technology, entertainment, and design together, the conference has now grown into a fountain of knowledge that is shared worldwide. The annual TED conference sells out a year in advance to those eager to experience the richness of the presenters—men and women who are shaping our lives now and into the future.

Fortunately, videos of the individual presentations have been made available as TEDTalks, allowing widespread exposure of the content of the conferences. The videos are copyrighted, but distributed under a Creative Commons (CC) license. This license allows for the reproduction, displaying, distribution, and public performance of the TEDTalks subject to guidelines found on the TED Web site.

And now in Second Life (SL), residents can view these TEDTalks on the Allston sim (169,81,25). The creation of the viewing area in Second Life is an ideal use of the CC license and results in bringing the conference experience to the virtual world. Millions of people have viewed the videos over the Internet, and for some, the presentations have taken on a cult status. By bringing the videos into SL others who feel the same can meet, watch, and discuss the ideas with all the conveniences of a virtual conference.

The viewing area on Allston allows an avatar to select among 60+ short videos of past presenters expounding their thoughts, works, and skills. The topics are as varied as the speakers themselves, but all share the common effect of instilling pride in the achievements of mankind.

Beyond the SL experience, more TED-related information can be found on the Web at <http://www.ted.com>. The Web site allows access to more videos, and visitors can search for TEDTalks covering many different topics. Previously it was possible to search for TEDTalks three different ways: by theme, talk title, or speaker, but now additional criteria allows searches based on reviews of viewers in categories such as inspiring, funny, and jaw dropping. There are a total of eight show themes: the original three—technology, entertainment and design— and five others—business, science, culture, arts and global. Searches can be further refined by ranking the talks based on the presenter with most talks, the talks most e-mailed, the talks most discussed, and recently updated talks. Anyone visiting the Web site should have no problem quickly discovering a talk that captures their attention.

The Web site encourages debate and discussion of the talks and allows viewers to join in on the conversation. Members are able to comment on the TEDTalks site, providing additional insight by adding their praise or criticism. Add to this a newsletter and the ability to download podcasts, and it is easy to see how the current owner, The Sapling Foundation, has lived up to the pledge to stand by the principles that made TED great. Additional pieces of the TED family include TEDGlobal and the TED prize. TEDGlobal is an every-other-year conference somewhere else in the world. TED Prize winners are awarded \$100,000 and given a wish so they can “change the world.”

So visit the Web site, become a member (it's free), and go hang out at Allston and wait for another TEDHead to show up—odds are those visiting will not be disappointed. ⚙️

Reporting Problems Online

Potholes, garbage, graffiti, downed limbs—probably some of the most common complaints received by a city and usually the most difficult to monitor because each can occur in a new location on a daily basis. Cities normally rely on citizens to report the majority of these occurrences. For those living in the U.K. this reporting process has been made much easier with the launch of several Web sites set up by civic-minded organizations. [FixMyStreet](#) is a Web site created by [mySociety](#), a project of the [U.K. Citizens Online Democracy](#). On this site, U.K. residents are invited to “report, view, or discuss local problems like graffiti, fly tipping, broken paving slabs, or street lighting.” After typing in a postcode, or street name and area of the problem, the user is shown a map of the area with a listing of other issues already reported by others. Problems already fixed are also indicated. Visitors to the site can click on the map at the location of their issue, and a new page will come up with a map showing a flag at the location chosen. The person reporting that problem can then fill in the specific information and even upload photos. The site also indicates the government body to which the information will be sent.

Users can browse through the listing of other problems previously reported by clicking on a particular problem to get more detail. Here is an example of the type of message that can be found on the site; in this case a very common complaint of “dog fouling.”

“We are finding that dogs are fouling in our front garden nearly every morning, and sometimes during the day. Obviously being out at work, we’ve not been able to see this happen. Any help/advice to stop this would be much appreciated as we have an open frontage, and it’s not unusual for children to be playing nearby.”

The site also indicates the status of each problem and gives others the chance to update or comment on that particular issue. If residents of a particular area want to stay informed about problems in a certain neighborhood, they can subscribe to RSS feeds for “local problems, including alerts for all problems within a particular ward or council, or all problems within a certain distance of a particular location.” The site also provides an entire listing of all problems reported. This summary is organized by council and shows the number of new problems, older problems, old problems—state unknown, recently fixed, and old fixed.

Bicyclists in the U.K. have their own chance to report issues through the [FillThatHole](#) Web site—another site set up to allow people to report hazards found along the road that might injure a rider. Common problems are potholes, raised/sunken manholes or drains, rutting, debris, or poor surfaces. The site is run by [CTC](#)—the U.K.’s national cyclists’ organization.

The group also has a site titled [ClearThatTrail](#) used for reporting obstructions along bike paths. Each site is similar to the FixMyStreet site with maps and forms provided for reporting problems. Each also has a listing of all problems reported and shows for each issue, the highway authority, district/ward/parish, date added, description, images if available, and status.

Because mySociety has indicated “people around the world can use and adopt our open source tools and services for use in their own countries,” those outside the U.K. might someday see similar services available in their countries. ⚙️



The importance of addressing collaborative working through 3-D and Web 2.0 applications is increasingly, but slowly, being recognised as a key to the future of built environment development. To explore and discuss the application of Web 2.0 within the built environment, plans are under way for a real life and virtual world event, **be2camp**, in October. Web 2.0 users in the U.K., U.S.A., Australia and Italy are developing the event, which will be based on barcamp principles.

The vision for be2camp is on three dimensions.

The *first* dimension is the real life event, planned for the U.K., in London, in October, the *second* being live parallel events within second life (at the Public Works Island), media streaming, live blogging and twittering, and the *third* dimension being the static material, that is the pre and post event materials such as papers, case studies, podcasts, presentations and videos.

Get involved in be2camp:

- Visit the **be2camp** wiki, register your interest, add your ideas, follow and help shape the development
- If you have a Twitter account follow **@be2camp** for announcements
- Visit the **be2camp** library through the wiki, share your materials, view others.
- Speak at **be2camp**
- Attend the real life event
- Attend the Second Life parallel event, again as a speaker or delegate

Support be2camp

Be2camp is looking for the following support:

- Be a be2camp sponsor
- Provide media connectivity/support to stream live into Second Life and vv
- Collaborative on line meeting rooms/spaces
- Media sponsors and bloggers

The main contact portal for be2camp news and information is through the wiki at <http://be2camp.pbwiki.com>

Grid Works, located in Second Life, is the media partner to **be2camp**

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