Unofficial Transcript to 2009 LDS Tech Talk

JOEL_DEHLIN: Hi, I'm Joel Dehlin. Welcome to the 3rd annual Tech Talk of the Church of Jesus Christ of Latter-day Saints. We appreciate you joining us. We will start today with a prayer given to us by Shelly.

SHELLY: Our Father in Heaven, we are grateful Father for the opportunity we have together, today, to talk about the technology of the church and the opportunities we have to participate, and to assist in spreading the gospel. Father, we are grateful for the blessings this technology provides to us, and to the members of the church and to the world. We ask Thee to bless us as we discuss the topics this evening that we might have Thy Spirit to be with us. That our answers and questions will be clear and concise, and that we might be able to communicate effectively. And this we pray, humbly, in Jesus name. Amen.

JOEL_DEHLIN: Thanks, Shelly. We're glad you're here with us. We'll spend about an hour together. We'll have some time for questions at the end. We want to let you know that if you are following us on twitter, you can use the ldsmediatalk hashtag, and we will be able to follow the conversation. I want to start off and talk to you a little bit of what has been going on in technology at the church. We have a lot of work that we need to do. We spend our time designing systems, developing systems, testing them, doing documentation, and supporting those systems. It is a lot more work than we have people in order to get it done. So we have a lot of needs that are being unmet today. That's where the Community comes in. The Community in the last few years has really started to help to get some of this work done, and we're grateful for it. Let me give you some examples. In the support area; Ward clerks for a long time have had a difficult time talking to each other to find out how they can be more effective in what they do. We created some forums, and on those forums we have hundreds of ward clerks that talk to each other and share ideas and work together; And we have people who spend a lot time helping to moderate those forums to make sure conversation is productive. Here's an example, and a look at some of those forums. If you haven't checked it out, you should check it out and join with the conversation. The second one is documentation. We have a tremendous need for documentation. In particular, we have so many members that speak so many different languages that it is difficult some times to get everything translated. Recently we had this document. It is a very technical document on how to set up a meetinghouse webcast in a ward. We have an internal translation department that is really busy on things like General Conference, translating scriptures, translating manuals, and so forth. So we decided to ask the Community to help us to translate it. In several hours, on the wiki, we had it translated into Spanish and also into Portuguese. And over the following weeks, more people have added to the document to make it more relevant and better. That's just an example of all the changes that were made; It's a log of all the changes. Testing; Last week, many of you know, that the church came out with the Spanish version of the scriptures. So, this is the website for the Spanish version of the scriptures, which came out online as well. The night before we went live, we wanted a last-minute look at the website to make sure there weren't any last-minute problems in the actual code. We just sent a message out on the LDSTech website, and then a whole bunch of people jumped online and helped us find us issues with the website. Mostly with the presentation, and graphics, and things like that. It was great to get all that support and help. The next is Development. We do a lot of software development. You've seen mormon.org and lds.org and all these different websites. This year, we have started to ask the Community to help us in our development. Right now, we are working on a new ward calendar that will go into the Stake and Ward websites; Also a new ward directory that will let find out the people who are in your ward, and their address information. The Community is helping us to do that. We have daily SCRUMMs, if you are familiar with Agile Software Development, and we have people who join with on these phone conversations, and they are spending a ton of time helping us to get this

development done. We would love any of you who are interested in helping to do this software development to join with us. You find that information on LDSTech. Next is Design. We need help with Design. Recently there was a lot of excitement about doing a home-teaching and a visiting-teaching application on the internet. For Church Headquarters, that is not a really high priority, but there are a lot people out there who want to see this application. So we asked people to join with us, and to help design it. Some great designers put together a design of what that application might look like. This is just an example. Now we're waiting for, and encouraging the Community to take up the torch, and help get this solution done. That's just some examples of where we are being helped by the Community. We would love to see that happen more, so we are working on tools and processes to help people to help us. Today, a very small percentage of the work that we do, is being done by the Community. We'd love to see that grow. We'd love to get a lot more work done, and to have the Community to help us do it. The way it works today, is at headquarters we have priorities, and those priorities are driven by the Brethren. They're things like General Conference, Scriptures, Magazines, and Mormon.org. Headquarters spend most of our time doing this work, and we're starting to have people in the Community to start out a little bit with this work. But there are a lot of priorities, we will never get to, because they are not a big priority for the Brethren. That's things like new ward calendars, calling tracking, and mobile applications. Those are things in which we believe we can help facilitate the work a little bit, but have the Community take a big role in helping to get the stuff done. We see it like this; There are a limited amount of church headquarters employees and we want to keep that as small as possible, but the red area indicate that there are people offering some contribution, but there just aren't that many of them. In 2006, basically we had David Rosenvall, and some other people who were helping us with the LDS online version of the scriptures. In 2007, we started to get a lot more involvement. For example, we came out with the LDSTech website, and the Community forums. We also did the first TechTalk, and that was a live thing we did in Salt Lake City, Provo, California, and Seattle, Washington as well. The Community started to respond. We ended up getting 10 Community moderators, 1800 new users, and 8000 posts were people were talking online about how to get this work done together. In 2008, we launched Subversion, which is a tool to allow people to share source code with us, so you could help us with development. We also did a TechTalk like this, and started to gather more excitement and more people who were interested. We did a wiki, which allowed us to do some things like help with documentation, help with translation, we released our Java stack to the Community, and asked the Community to help us write code. We did an issue-tracking system in Jira. Finally, we did an Internet and Family Safety wiki, where people could go and share information with each other on how to keep their family safe on the internet. The Community responded. We launched a Hometeaching/Visitingteaching solution, and there is still some work going on in the Community to keep this project alive. We launched a church history timeline solution, which will allow people to view together different elements in church history in a dynamic way. We also launched something really interesting which is a sample membership database. So if you look at this slide, on the lefthand side, we wanted to give people access to data so they could test their applications with us, but we didn't want to give them access to the actual data, so we created a sandbox environment with dummy, fake data people could work on their solutions with fake data in it. Then once we got the solutions to a point where we were comfortable, we could move them over into production using real data. That's called CODA, and our development sandbox. We ended up with 15 Community Moderators that year, 1000 new users, and 14,000 posts. In 2009, we created a clerks wiki where clerks could communicate with each other and actually edit and post documents. We're doing our 3rd Annual TechTalk. We are working on, but have not yet completed, a simplified version of the Java Stack for people to help us with development. We're creating web services for people who are creating their own applications and want to use those services or want to help us with our solution. Finally, we are doing a lot more documentation, and help from the Community in translating our documents. This are mostly technical documents. So how have you responded, what's been happening ? We have had several mobile

applications that are in-flight right now. People are working on scriptures for mobile. The Mormon Channel application for the iPhone, which many of you have seen, was something that was developed by the Community. We are working on things like WardDirectory, and different things in the Community for different mobile platforms where you can join in and help us to develop these applications for the membership in the church. There a couple of other things, too. For example, there were 2 applications we needed internally, where we needed some quick help. We asked the Community to join in, and they created an United Way Application and a Cumorah Application are 2 examples of that. There are more. Church recreation properties, wiki translations (we'll do more of those this year), lds.org next generation applications and a child protection app. Things like that are things we want the Community to join in and help us do; Or are in-flight right now. Then we had a whole lot more moderators, and a whole lot more posts that happened on the LDSTech website. So, what's going to happen next year ? Next year, we will have a LDS Developer Conference and we'll do a bunch more work in simplifying our tools, simplifying our web services so you join in and help us get stuff done. We are also excited about the Community helping us to do things like Tagging. Looking at video in our archives,
 and finding a scene in the video, and Tagging it a scene on Faith, or a scene with the Savior. We could also use help in Tagging our content on lds.org so it is more relevant for searches, like searches from google. We are really excited about the opportunity to use the Community to help us Tag data. We will also use more translation from the Community, as well as help on, all the projects we're working on. I'd like to share with you just one example of a great project that is happening. This is ldsmaps. This is something that is not in the Community right now, but is something that in the future, we are looking at getting help with. This is a new application that will replace Meetinghouse Locater. You can see here - You can see a map - and it shows you your ward boundaries. You can see all the homes in your ward, which are shown with the little yellow circles, and if you mouse over one of those homes, it shows you information about the family that is in that home, and you find out more about your location. We're excited about integrating this into everything we do - On the calendar, in the ward directory, and so forth. We want to take a minute and just recognize some people. There are some people who have really spent a lot of time and energy in helping us to get stuff done. The first is the lifetime achievement. Lynn and David Rosenvall have been amazing. For years now, these folks have been responsible for bringing us scriptures.lds.org. The work began in 1987, making the scriptures available electronically. This has all been donated. Time donated to the church as well as servers, software, and so forth. The scriptures now are in 14 languages and growing. We are offering David and Lynn, just a little memento - a stone that came from Temple Square from one of the pavers. On it, we put LDSTech Award Lifetime Achievement. There will be one for each of them. We are very grateful for the hard work they have done. The next is Top Tester. Pete Arnett is really helping to get a lot done. Pete is QA engineer on the local unit calendaring project. He consistently works to stay on top of the defects, often leading ahead of some of our own Testers. He has a great work ethic and has done a great job in helping us to release a high quality application that you will actually see in the next few months. Next is the Coding Guru. Bill Wilcox called me a couple of years ago. He had sold a company in Europe, and moved to the United States. He'd called, and said, " I want to help out. How can I help out?" We connected him to our team, and he's been working on the Local Unit Web Sites. He contributes a ton of hours. He's probably one of our most prolific coders. He gets so much code written, it has been great to have him on our team. He calls into our daily SCRUMMs. He has done all the stuff that has allowed the ward directory to be synchronized with Outlook, iCal, and so forth. And that is another application you will see in the next few months. We are grateful to Bill for being our Coding Guru. Next is our Helping Hand. If you spend much time at all on LDSTech, then you'll have noticed Alan Brown, he's been a member since November, 2007. He spends countless hours moderating the forums, answering questions, and offering advice to people. It's great to see him online. He's instrumental in organizing, administering, and contributing to the wiki as well. We are grateful to

Alan for being our Helping Hand. And to all the people who are helping us out in the Community - we love it. We are so grateful for all of the help. We are going to take a minute now, and I would like to introduce a panel. We have 4 Brethren here who will help us answer some questions. Furthest to your right is Tom Welch. Tom is a force. Tom has been working with the Community since 2007. He single-handedly put up LDSTech, he started running it as a server under his desk, I think. He moderates the forums, he gathers the developers, he gets excitement up in the Community. We're all grateful to have Tom, because he almost single-handedly helped us start up our Community efforts. John Edwards is joining us in the past few months, in fact it has been a month, isn't it ?

JOHN_EDWARDS: That's correct.

JOEL_DEHLIN: John is the former CEO of Move Networks. You'll know Move because it is the way many of you watch television online. Let's see what station uses Move?

JOHN_EDWARDS: Oh Move is used by ABC, FOX, ESPN, by TeleVisa, the largest Spanish-speaking broadcasting company in the world.

JOEL_DEHLIN: And it's the technology we use to broadcast General Conference. John was the founder at Move Networks, he was an executive vice-president at Novell. He's a serial entrepreneur, so he's started 6 or 7 businesses. He called and said, " I want to help out the church". So he's here, and we're grateful to have him. He's the director of the Emerging Technologies Group, so you'll here more from John in just a minute. Rich Farr is our Director of Program Management for our external facing websites. So Rich is the boss of lds.org, mormon.org, the missionary application system, and things like that. Finally, we have David Bergraff. David is our Director of Development, so David manages all of our Software Development [[Missing sentence]]. David was most recently at Microsoft and was in charge of the Visual C++ team. I have some questions that many of you have asked, so we are going to read as many of those we can. I also will be looking over at....oh, before we do that. I want to turn the time over to Gordon for Family History.

GORDON_CLARK: I appreciate the opportunity to be a part of this broadcast, and part of the lds church operation. My responsibility here has really been like Tom Welch to develop a Software Developer Community around FamilySearch and the Genealogy marketplace. Our approach has been a platform approach, by providing more and more open data. I say open, in that it's reachable by our applications and through APIs with a RESTful interface for both commercial and non-profit activities people can develop applications that make use of our data. Also as we find technology that we either develop or find that is useful in the industry we want to make that technology available and cause more open-source projects to be built that feed the Genealogy and Family History marketplace. One of biggest areas that I'm involved in is creating developer services that are attractive so both individuals, software companies, open-source motivated individuals are getting assistance from us through webinars, through websites, bug-tracking systems to help them in the development of their software. We also do training and have annual conferences.[[missing sentence]] The last bullet you'll see here on this slide regards the affiliate program. We find that as certain projects mature in the capability they would like to partner with a little bit more, but we don't call them partners, we call them affiliates. We work on marketing assistance for their programs. It's a good carrot to use our name of FamilySearch, and we have a certification program to let the consumers know that we have actually looked at some features of their programs and find that they meet a certain level of quality, and they do interface with our APIs. So that's kind of an overview of the next 3 minutes I have to take a look at the platform. This rectangle in the upper righthand corner is really talking about the data we're focused on. FamilyTree has been rolling out and it's close to 1 Billion names, and that's the thing the church

membership has been anticipating. But we're already beginning development so it can be made available to non-members. No time-limit there, but that is a big part of our effort. We here are looking at scalability and have [[missing words]] of 50 million plus when we open up to non-members. We are also looking at the issue of involving more entities in the software development effort. RecordSearch is the database that relates to all of the documents that support the evidence of conclusions that are made about relationships and what people did when and where. You may have heard of the Granite Vault. RecordSearch represents the Granite Vault which over an estimates of 7-10 year time period will have all of the microfilm the church has ever collected digitized and that will be a fantastic research to find relatives. Last year we launched a research wiki. There are APIs into that, using StandardMedia APIs. We looking to open up more of our catalog and indexing capabilities through our APIs. I would like to see right along there the LDS timeline and LDS maps, because there are certainly other resources that can have APIs, but I don't make announcements for the church. If we go down here a thing that has surfaced this last year is we have found in the Family Search Developer Community at large, they want to make it easier for others. They are the pioneers that want to cut the road, that want to make it easier for other software developers. So we have many volunteers that have worked together to make API wrappers in various target environments. Like .Net, Java, Cocoa, Objective C, ActionScript, Ruby, Perl, Python, Google Web Toolkit, PHP, and ColdFusion. So as you become a member of our community, we can direct you where you can find more information, download these open-source projects, and ramp up much quicker in interfacing with our API. As we introduce new APIs, we go back to this community to make sure those technology gateways are made possible through these various languages. The whole purpose of this is to facilitate rapid development. And Rapid Develop in actual End-User Applications. Whether they're free or commercial applications. We do this through our developer tools and services. We are very committed in making it easier for software developers to develop viable applications in the area in which they have interest. I do need to comment here why the open platform is valuable. We cannot develop End-user applications for various cultures, target markets fast enough. We need to be in the data business as much as possible so that the Community are developing applications that fit their niche and their country and their culture. Culturalization is a whole lot more than translation when you actually get down to user experience. Here's our scorecard, and we're going to wrap up here. Our membership in our devnet.familysearch organization (kinda like a companion to LDSTech) - 585. 274 are active in our sandbox where they can play with our APIs and put in their own data and not corrupt what's actually in our production systems. Software projects identified - 48. Affiliates - 31. Certified Products - 13. We definitely see that to double in the next 9 months. Some of the big ones you may have heard of are AppleTree, RootsMagic, Ohono Software, GrowBranch, LiveRoots, MagicKey. These are commercial applications that have chosen to interface with our data because it adds value to their product and it makes it easier for lds members to do certain activities with their product. If you want more information, questions, join devnet.fanilysearch, and see all the resources we have available to you. And please, please browse our very popular website that has millions of visitors. www.familysearch.org. If you want to see what's on the horizon go to labs.familysearch.org. Looking forward to participating with you, and have you participate in our community. Thank you.

JOEL_DEHLIN: Thank you. Now we're going to go to some questions. We appreciate those of you who have asked questions previously. As a reminder, if you have additional questions feel free to twitter using the hashtag ldsmediatalk. We're going to go first to John. John, could you talk a little bit about your group, and about some of the exciting technologies that will be coming?

JOHN_EDWARDS: Absolutely. The Emerging Technology Group is focused on some of the most current and future emerging technologies such as mobile computing, social networking (How do we participate in that? Or do we even participate ?), video and video delivery. These are general areas. Of

course there are tons of innovation going on at the church. Tons of new opportunities for developers to participate. I think we need to build upon what Tom has already started. If we're going to make get mobile applications stimulated in the Community we got to create and make it easier for all of you to come in and add value. There are some great examples of applications like the Mormon channel, the scriptures that already out there. How do we take and facilitate that; to grow it. If you just look at one idea, over a billion new cell phone shipped last year, and we have almost 4 Billion cell phone. 99% have the capability to text. Is there something we can do to make it easier for us to stay connected and to work with global computing, and we've all seen what has happened with the nexus of video streaming in the community, so we're focused in on some of these areas that will enable developers to think big and to grow and to accelerate the delivery. I think the guiding principle is, How do we open the door for the gospel message more often, more frequently ? How do we create new efficiencies for both the church and its members. Behind all that I believe is going to be a strong developer community that helps us do that because we simply cannot do all the work ourselves. There are many members of the church in different countries that don't have a computer, don't have a television, don't have a phone in their home, but they have a cell phone. In some emerging parts of the world, they more apt to skip right over land-line and dedicated connections and go right into the mobile community with a 3G network, and even in some cases a 4G network, and get out there and work. So these applications that the whole team is building have to access to them on smaller devices with maybe good bandwidth, but different computing capabilities.

JOEL_DEHLIN: Thanks John. David, got a question for you. What are some of the technology challenges that you see that the church will face in the future ?

DAVID_BERGRAFF: Probably some of the largest technology challenges come from just the worldwide reach of the church. Before I came here, I was at Microsoft and there we translated, I thought, into as many languages as any organization in the world. I was stunned when I came to the church and learned that from a print and media perspective we way outstrip the number of languages we published at Microsoft. One of the challenges we have is everything we do goes potentially to all parts of the world, and there's a huge diversity, as John just referred to, in the different types of mediums we have to work with, and the different types of cultures and people we have to work with. As we work from an engineering perspective, some of our greatest challenges come from getting the message out there, or getting the work out there, in a way that is appropriate for all the different places of the world. There's lots of technology challenges also with which languages and platforms we remain quite current on most of the major platforms, the database systems, and all that, but we view that as a fun part of the job. But what we're really challenged with is getting everything out there to where it needs to be.

JOEL_DEHLIN: Thank you. Tom, so recently we came out with iPhone application, the Mormon Channel; you were obviously very involved in getting that done. What do you see as the future for the Mormon Channel ?

TOM_WELCH: We've had some great feedback from a lot of the people who are using the product. In fact, the product has had over 55,000 downloads since we released it, and is available in over 56 different languages. It has been phenomenally successful. The thing that we're seeing are things like people want to listen to all of General Conference without having to navigate around, and switch back, and select different talks. People want to see more media that we have. We have all these hymns online, we have even more content. So they to have a lot of that in there. People would like to see the ability to search. This is one of things we're working on right now were people might say "I'd like to find a talk about faith or a talk by Elder Bednar" or something like that were they can actually search

and find a particular talk and then be able to stream and listen to it. So there are a lot of new features, and if people want they can go on the wiki and they can suggest new features as well. We welcome that because it's just about making the product that much better.

JOEL_DEHLIN: So what if there is someone out there who was not involved in the original development of the application and they want to help test it, or they want to help develop it. What do they do ?

TOM_WELCH: If they want to help develop it, all the source code is available on our subversion server. All the information on about how to develop it, and where they have to check out, and so forth is right on our wiki page. If you go to tech.lds.org/wiki and you search for Mormon Channel you'll find the information. From there, we talk about the source code, how to check it out, how to build it. If you want to help test it, that's a little bit different for the iPhone, because with the iPhone you actually have to have your deviceID programmed into the program, so contact me (my contact information is also on the wiki) and we can get more people helping to test that particular application. I'd like to also note that the Mormon Channel is being developed on many other platforms as well. We have teams around the world helping to develop it for Blackberry, for the Palm Pre, and so forth. You'll see the same technology available on multiple platforms.

JOEL_DEHLIN: John, I have 2 questions for you. Of all of us, you're the newest one to be employed by the church, so first, What do you see is the difference (and this was from the Community) between leadership you've seen in industry and the leadership traits you need to be successful when you work in the church ? And the second one, I'll just add in, what has the transition been like ? Going from Industry and your own company to being a church employee ?

JOHN_EDWARDS: Well, first of all I would say that there are some similarities which are that there are people with great vision and great work habits and that they are able to lead a team. I think the differences come; particularly many of the people here on webcast today come from a very small organization. Maybe they can get up, think an idea, and it's done. The challenges and the opportunities that exist in a large organization is that you can put out a lot of output but you got to coordinate. So it's an issue of complexity, I think, in terms of moving projects forward. That takes a leader who is willing to persevere in the same way as an entrepreneur I had to persevere in the market to accelerate growth against odds. I think you have to deal with complexity over here a bit. The transition for me, I'm very new, so I'm still learning, I'm still trying to absorb, and there's just a fabulous set of people here all with the desire to do great things. The coordination is great. What we need is to accelerate more the outside development coming in. That's a process that has to be developed over time.

JOEL_DEHLIN: One of the other questions is whether we are planning to put any MLS online ? In fact this was asked by multiple, multiple, multiple people.

UNKNOWN_SPEAKER_TOM_WELCH?: We've heard that a bit in the last while. So MLS has been one of the key applications that we released several years ago that has really helped to accelerate the improvement of church records. It is a lot easier now to get records now from one unit to another, and it has really helped the accuracy of the data that the church manages. But, as you know, it's locked behind the clerk's door, and a lot of people want to get access to that. Our strategy isn't to just replace MLS, it still has a role and will help the work going forward. But we recognize that there's a lot of the data, a lot of the reports, and some of the transactions, that we can release online and allow people to access from wherever they may be on the internet. We're working on that right now. In fact, we have some of the original concepts that we're putting into our labs environment that will be available to a

limited small number of users later this month. It's a gradually replacement, or a gradual enhancement of what's available on the internet that's currently available in MLS. We're excited to see that going forward.

JOEL_DEHLIN: John coming back to you for a minute. What about scriptures for the iPhone? What other future mobile apps do you see coming ?

JOHN_EDWARDS: There a scriptures for the iPhone right now as everyone in the Community knows; What we want is to continue to develop the ability to have a common standard of data. Make the efficient and fast for different kinds of platforms. I think we also have to take a look at the interface for platforms and how that works, because you have different capabilities out there. We're experimenting with a lot of things, and a lot of it you can imagine. You can imagine trying to get applications that deal with extending information about ward and stake to the individual, but there's a lot of privacy issues there, and you have to be really, really careful. But members want to know, "How do I text out, and get my young men or young women to be informed. You have all these young people using text. As much as fathers who pay for the bill may not like it, they are out there and they are doing it. How do we leverage the fact that they're connected and they're online ? But the same is true with all of us kinda older generation, people who are online, who are connected. My wife and I were sitting in our bed last night and we both had our laptops up, reading. Right in the middle there, she text me a note. That's ridiculous ! But I think we got to take a look carefully about how technology is good for us and where technology might not be good. I think sometimes you have to back off, and say let's be guided by principles here. Many of the applications are coming from the developers. Many of the ideas. We want to stimulate that. If we could do one thing this year it would be to continue the development, continue the engagement with the Community, I think we will have created that leaven that is so absolutely critical right now. Then create a few more standards, standards for mobile, ways to do that consistently. Think through the strategy, so we can unleash the capabilities throughout the process.

JOEL_DEHLIN: Right. Now Tom, I came up with this one myself, you've been slogging it out, working with the Community here at the church for a few years now. What's one of the most exciting, fun things you've been able to do in the past few years? You went home and told your family, "Aha, I made a difference today"

TOM_WELCH: I don't know that it's been me that made the difference, but I have to say the most surprising thing to me is the number of people that are willing to come forward and volunteer on a project they will never see. The assumption I had when I started this is that most people will come and want to work on a project that they have a passion about or that they can use. Things like Local Unit Calendaring, and so forth, and we have lots of people that are doing that. But we also have a lot of people who just said "Hey, I'll help". A perfect example was we needed a little application internally for the church employee for United Way contribution. We had a guy who came from the Community, who came and said, "I'll help". He will never see the product in production. We have several other projects like that people are just willing to come and contribute and help without any thought about them being able to use or benefit from that personally. That's been extremely gratifying. In fact, I talk to my wife and my family all the time about the contributions that these people are making. It's very similar to the contributions people made years and years ago. In fact, the Tech awards were giving away a piece of Temple Square. If you think about the volunteer labor that went to build Temple Square; This people are doing the same thing, in just in a very different way. That's been the most gratifying for me.

JOEL_DEHLIN: Great. Dave, I'll just read this one- Will there be more support for a common

publishing format that will enable a third-party developer to convert the content into other formats - such as PDF ?

DAVE_: The answer to that is absolutely yes. As an organization, we largely are focused on trying to leverage the standards that the industry produces. I expect, longer term, as we begin to roll out more content onto the web, you will find that we use more and more of the standards that are out there. Not only standards for representing the content, but also for transmitted content. Through services and other industry standards.

JOEL_DEHLIN: Okay. Rich, we talked a lot about the replacement for Local Unit Web Sites. It's only in the United States today, and there are usability issues, and we can improve it a lot. The question is, When will Local Unit Web Sites be internationalized ? And when will we get the new version ?

RICH_FARR: Like you pointed out, Local Unit Web Sites is an important app, it's one of the most popular features on lds.org, but it's not serving the purpose that it could serve, especially with the reach it could have internationally. We're working on that right now. As it was pointed out in Joel's presentation there are Community members that are helping and contributing to that, and we plan on having the first components of that a Calendar and the Directory available as a public beta late this year in December.

UNKOWN_SPEAKER_TOM_WELCH?: Because it's a Development environment, and we're using the Community to help development. Anyone who wants to see the progress of the development can go to a site right now and play with it. Now, they can't login with their own creditinals, and use your own data. They can just login with one of the predefined username/password pairs. But if you want to see what we're doing with the calendaring, and offer your feedback, go to tech.lds.org/luc . When you go to that you will actually see some username/password pairs on the screen you can us to login with. If for example, you want to login as a Stake Clerk.

JOEL_DEHLIN: Thanks. Alright Dave, this is our PhD. question. How much progress has been made in using ind ices to Mormon Periodical to develop a Mormon Ontology for the Semantic Web ?

DAVE_: We are very excited. Recently we have been experimenting with new technology for indexing and working with content that will able to facilitate research, better study, communication, collaboration, and we've seen some very positive things that have come from that work. We expect that, over time, we will be able to expose a lot more information in ways that will enable members and [[unknown word]] of the church to do much greater research and study, and much greater learning from the materials that the church has to provide.

JOEL_DEHLIN: Thanks. A question came across from Francisco (via Twitter). Rich, we'll direct this at you. Talk more about the ward mapping and boundary change tools that might be available. As much as you can talk.

RICH_FARR: We're excited about maps. You showed a piece of what we have out there. We have out in a beta environment right now a new version of maps. As we put the mapping data, and overlay it with the mapping technologies that already exist, using the various providers and technologies, it enables members (especially in places that are more dispersed) to understand where the members are out. Part of what we're looking at is the ability to have people move the geospatial data, so we can align the address with the actual location on a map. Because sometimes that's not accurate. As put that out in member's hands, it will allow them to become very accurate, and then over time, we'll allow

them to drill deeper into the data, so you can see people on the map, and see where they're at, and other things you need in kind of a directory type of application. You'll be able to drill into the information as you have rights to as a user of that map.

JOEL_DEHLIN: Okay, great, thank you. I have just one more question for all of you, the question is Mac or PC ?

TOM_WELCH: I'm a Mac guy

JOHN_EDWARDS: Mac

RICH_FARR: I noticed you didn't ask Linux.

DAVE_: I am totally a PCBSD or FreeBSD.

JOEL_DEHLIN: Good, Thank you. That's all we wanted to talk about. We appreciate you joining us. There are hundreds of you online right now, and grateful you took the time to join us. Think about next year if you are a developer or a designer or someone who does Quality Assurance. We are having a LDS Developer Conference next year, so people who want to come and join us and talk in person, see some of things we're working on; We'd love to have you do that. We'll sign off now with a closing prayer which will be offered by Cassie [[last name?]].

CASSIE: Our dear Heavenly Father, we're grateful for the opportunity we've had to come together as people interested in using technology to bring forth the Gospel to everyone, and the best way to do that. We are grateful for the Spirit that has been with us, grateful to connect with so many people. We say these things in the name of Jesus Christ. Amen.