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Welcome to Southwest Fox and Southwest Xbase++ 2016!

The thirteenth annual Southwest Fox conference is the only Visual FoxPro conference in North America. For the fifth year in a row, Southwest Xbase++ is the only North American conference for Xbase++, from Alaska Software. Attendees may attend sessions of both conferences for the price of one! The two conferences are held in the same conference center and share meals and exhibitor space.

Although we’ve worked hard to put this conference together, it wouldn’t have happened without the efforts of quite a few others. First, our thanks to our speakers, without whom there would be no conference. We’ve been giving presentations for many years, so we know what’s involved in preparing a high-quality conference session. Our thanks to Rick Borup, Roger Donnay, Bobby Drakos, Alec Gagne, Andreas Gehrs-Pahl, Andreas Herdt, Venelina Jordanova, Chris McGuinness, Jody Meyer, Steffen Pirsig, Eric Selje, Rick Strahl, Tuvia Vinitsky, Till Warweg, Christof Wollenhaupt, and our keynote speaker Phil Sherwood, who made the time to prepare materials and be here, despite busy work and family schedules.

Our sponsors help keep conference costs down by providing funds, and goodies for us to give away. Our exhibitors took the time to come to the conferences to show you the latest tools to help you get the most out of your development efforts.

Rick’s wife Therese and Tamar’s husband Marshal dropped their usual responsibilities to come along and serve as staff, taking on whatever odds and ends needed to be done and errands needed running. Conference Geeks provided projectors. Dave Aring of Visionpace created our logos. Finally, Frank Perez Sr., who lives in the area, accepted shipments for us, saving us time and shipping charges.

We hope Southwest Fox and Southwest Xbase++ are everything you were expecting and more. Please be sure to fill out the conference evaluation to let us know how we did, and what we can improve. If there’s a problem we can fix right away, please let us or one of our staff know.
Conference Information

In this guide, you should find everything you need to get the most from the conference. But don’t hesitate to ask us or a staff member (look for the red Geek Gatherings shirts) if there’s anything you need.

Conference Center
Southwest Fox and Southwest Xbase++ are held at the SanTan Elegante Conference & Reception Center (next to the DoubleTree by Hilton), 1800 S. San Tan Village Parkway, Gilbert, Arizona, 85296, 800-445-8667, 480-809-4100, http://doubletree.hilton.com/en/dt/groups/personalized/P/PHXSTDT-GEE-20160922/index.jhtml. Maps of the complex and the conference center are shown below.
Registration and Information
Registration is at the Geek Gatherings table in the Desert Rose room, Thursday from 8:00 a.m. to 4:00 p.m. and Friday and Saturday from 7:45 a.m. to 5:00 p.m. This is also where you can find conference staff for information.

Badges
Be sure to wear your name badge to all conference sessions, meals, and breaks. Your badge is color-coded, indicating what you’re eligible for. For example, only those attending two pre-conference sessions or who paid for it in advance get lunch on Thursday.

Watch for the “New to Southwest” image on badges. This is for people who haven’t attended Southwest Fox or Southwest Xbase++ before; in some cases, this is their first conference of any kind. Please take some extra time to introduce yourself and make all our new attendees feel welcome.

Sessions
Pre-conference sessions are held in the Elliott and Flagstaff rooms. Regular sessions are in Arizona, Bisbee, Elliott, Flagstaff, and Gilbert.

Trade Show and Exhibitor Track
The trade show is held in Desert Rose, the same room where meals and refreshments are served. Trade show hours are 8:30 p.m. to 9:30 p.m. Thursday night following the keynote presentation (a reception), 9:00 a.m. to 5:30 p.m. Friday and Saturday, and 9:00 a.m. to 12:00 p.m. Sunday. Be sure to spend time talking to the exhibitors and learn how their products and services can enhance your development efforts and your business.

To learn more about the products being offered by the exhibitors, be sure to attend the sessions in the exhibitor track (see the schedule for rooms and times).

Keynote Presentation and Trade Show Reception
The conference keynote will be presented on Thursday at 7:00 p.m. in a combined Elliott/Flagstaff/Gilbert room. It will include a welcome to the conference followed by the keynote presentation by Phil Sherwood, titled “You 2.0,” in which Phil discusses how our mindset affects everything we do from our careers to our relationships and how, by just making a few changes in how we think, we can get better performance and results in all areas of our lives.

A reception, sponsored by Servoy, immediately follows in Desert Rose as part of the trade show. Come have a drink on Servoy!

Free Wireless Internet Access
Free wireless Internet access is provided throughout the conference area. Please share nicely with other people accessing the Internet. For example, streaming video or music would not be very cool.

Evaluations
Evaluations are very important to the success of the conference. They help us plan for next year’s conference by letting us know what we did right and what we could do better. They help speakers improve and fine-tune their sessions.

Session and conference evaluations are done online. When you check in, you choose a user ID and password. Navigate your browser to https://geekgatherings.com/Evaluation, login, and fill out evaluations for each session.
and at the end of the conference for the conference as a whole. As an incentive, we’re doing a drawing at the closing session: those who submit evaluations are eligible for a free registration to a future Geek Gatherings event at the closing session.

Closing Session
The closing session formally ends the conference. It begins Sunday at 1:00 p.m. in a combined Elliott/Flagstaff/Gilbert room. Be sure to finish your evaluation of the conference, and to submit at least one session evaluation, before the closing session to be eligible for the drawings.

Giveaway Drawings
Drawings for door prizes will occur at the dinner party Friday night and at the closing session on Sunday. We have lots of software and other prizes to give away. For drawings on Friday, you must claim your prize before the closing session. For drawings at the closing session, you have to be present to win, so be sure to attend that session.

Meals and Breaks
Breakfast is provided Friday, Saturday, and Sunday mornings. Lunch on Thursday is provided only for those attending two pre-conference sessions or who pre-purchased lunch during registration. Lunch is provided on Friday and Saturday for all attendees. Dinner is provided Friday night (see the next section, “Dinner Party”). All meals are served in Desert Rose. Refreshment breaks are provided Friday and Saturday afternoon from 4:45 to 5:15 in Desert Rose.

Dinner Party
The conference dinner party is Friday night, from 7:00 p.m. to 8:30 p.m., in Desert Rose. It’s a great opportunity to relax after a long day of learning and meeting and chatting with fellow developers and speakers.

If you want to bring a guest to the Dinner Party, tickets are $50 (which just covers most of our cost), available at the registration table.

Games Night
Following the dinner party Friday night, join us in Desert Rose for Games Night—pick a table and join in with Apples to Apples, Tri-Bond, and other board games. We’ll even have Texas Hold ‘Em for poker enthusiasts.

Airport Transportation
If you want to share a ride with someone back to the airport, sign up on the airport ride sheet on the bulletin board.

Conference Materials
The conference download site, ftp://www.swfox.net (you will be provided a user name and password by email), contains white papers and sample code (if provided) for every session.

Bulletin Board
A bulletin board is available to post job openings, notices, meeting messages, etc. Also, if you want to share a ride back to the airport, sign up on the airport ride sheet on the bulletin board.
Spouse/Significant Other Program
Spouse and significant others have informally found each other at prior conferences, and many of them have formed strong friendships over the years. Spouses will meet at a marked table inside the trade show reception after the keynote so they can plan activities to do during the conference while their special geeks are immersed in the conference.

Guidebook for Mobile Devices
Southwest Fox and Southwest Xbase++ are mobile again this year! We’ve created a conference schedule on Guidebook, a popular mobile guide for events. Simply install the Guidebook app on your mobile device, then load the Southwest Fox/Xbase++ 2016 guide. You’ll be able to see complete session descriptions, view the conference schedule, see speaker photos and biographies, create to-do items, and best of all, create a customized schedule of sessions.

iOS or Android
Download the Guidebook app from the app store or scan this code:

![QR Code]

Open the app, tap “Find a Guide,” and search for “Southwest Fox/Xbase++ 2016.” Alternatively, tap the small QR code icon and scan this code, then click “Download Guide”.

Other Mobile Devices
Use the Guidebook mobile web version at https://guidebook.com/g/swfoxxbase2016. Note that you have to create and sign into a Guidebook account to create your own customized schedule.

Mobile Phones and Laptops
To avoid interruptions for speakers and other attendees, please set your mobile phone to silent or vibrate mode during sessions. If you do need to take a call during a session, please leave the session room. Also, please mute your laptop if you plan on using it during sessions.
Photography, Video, and Audio Recording
You are welcome to take photos of sessions (please ask the speaker’s permission first) but audio and video recordings are prohibited.

Polo Shirts and Fleeces
If you ordered a conference polo shirt or fleece before the conference, it will be available for pickup at registration.

Meet ‘n’ Greet
Veteran conference attendees will tell you that one of the major benefits of attending a conference is the opportunity to meet and get to know other developers. While the Internet has certainly made the world a much smaller place, there’s nothing like chatting with someone face-to-face between sessions or over a beverage. The people you meet this year may be next year’s co-workers, employers, employees, clients or trusted resources. Make it your goal to meet at least one new person at this conference.

If you’re a first-time attendee, don’t feel intimidated because some attendees know each other well. Join a conversation! That applies to speakers, too; we have no unapproachable rock stars in our community, only really nice people. Feel free to engage any speaker in a conversation on any topic, not just programming. See the Tips for Attendees page (http://www.swfox.net/tips.aspx) on the conference Web site for more ideas.

One of the best places to meet other people is in the bar. You don’t have to drink to have great conversations with fellow developers. Also, there’s a piano in the bar solely for our use, so feel free to sing along with favorites and golden oldies.

Assistance
If you have any questions or problems, please see one of the conference staff: Rick Schummer, Therese Schummer, Doug Hennig, Tamar Granor, and Marshal Granor. We’ll be wearing red Geek Gatherings shirts (except when Rick, Doug, and Tamar are wearing their speaker shirts).

Local Restaurants
There are lots of restaurants at the SanTan Village, just down the street from the hotel, including Famous Dave’s BBQ, Cantina Laredo, Brio Tuscan Grille, Carrabba’s Italian Grill, Red Robin, and many others.

Special Offer from DBI
DBI is giving away a full license of Calendar COM (ctxCalendar) to each attendee. Calendar COM is a really great Outlook style scheduling control with three fully extensible views baked into one control: a multi-column Day View (a multiple day appointment scheduler for one resource or multiple resource appointment scheduler for one day at a time), a Week View Appointment Scheduler, and a Month Calendar / date picker. It comes in both 32-bit and 64-bit versions.

Special Offer from Eqeus
All attendees are eligible for a special conference discount of 20% from Eqeus, developer of XFRX. If you’re not familiar with XFRX, see Rick Schummer’s session “XFRX vs FoxyPreviewer” (http://www.swfox.net/SessionsSWFOX.aspx#XFRX_vs_FoxyPreviewer). The coupon code for the discount is SWFOX2016. It is valid from September 22 to midnight of September 30 and it can be applied at checkout in the online store (http://www.eqeus.com) to new licenses as well as upgrades.
# Schedule Overview

## Thursday, September 22

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>9:00 - 12:00</td>
<td>Pre-conference sessions</td>
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<td>12:00 - 1:00</td>
<td>Lunch (2-session pre-conference attendees or pre-purchased during registration only)</td>
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<tr>
<td>1:00 - 4:00</td>
<td>Pre-conference sessions</td>
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<tr>
<td>7:00 - 8:30</td>
<td>Keynote presentation</td>
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<td>8:30 - 9:30</td>
<td>Trade show reception</td>
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## Friday, September 23

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<th>Time</th>
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<tr>
<td>7:30 - 9:00</td>
<td>Breakfast</td>
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<td>8:30 - 12:45</td>
<td>Sessions</td>
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<tr>
<td>9:00 - 5:30</td>
<td>Trade show open</td>
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<tr>
<td>12:45 - 2:00</td>
<td>Lunch</td>
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<tr>
<td>2:00 - 6:30</td>
<td>Sessions</td>
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<tr>
<td>7:00 - 8:30</td>
<td>Dinner party</td>
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## Saturday, September 24

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## Sunday, September 25

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<td>9:00 - 12:00</td>
<td>Drakos / Herdt: Creating My First Xbase++ Desktop App, Part 1</td>
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<td>12:00 - 1:00</td>
<td>Lunch (2-session pre-con attendees or pre-purchased during registration only) (Arizona)</td>
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<td>1:00 - 4:00</td>
<td>Drakos / Herdt: Creating My First Xbase++ Desktop App, Part 2</td>
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<td>7:00 - 8:30</td>
<td>Keynote Presentation (Elliott/Flagstaff/Gilbert) Sherwood: “You 2.0”</td>
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<td>8:30 - 9:30</td>
<td>Trade Show Reception (Desert Rose)</td>
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<td>7:30 - 9:00</td>
<td>Breakfast (Desert Rose)</td>
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<td>8:30 - 9:45</td>
<td>Gehrs-Pahl Geo-Coding and Mapping (R1)</td>
<td>Donnay Working with XML in Xbase++ (R1)</td>
<td>Hennig Lessons Learned in Version Control (R1)</td>
<td>Schummer XFRX vs. FoxyPreviewer (R1)</td>
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<tr>
<td>10:00 - 11:15</td>
<td>Servoy Building an HTML5 app in an Hour</td>
<td>Drakos / Pirsig Increase Your Xbase++ Programming Skills</td>
<td>Wollenhaupt The Security Cookbook (R1)</td>
<td>Meyer SQL Server Indexing for the Rest of Us (R1)</td>
<td>Forward Thinking Software CleverFox Backup</td>
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<tr>
<td>11:30 - 12:45</td>
<td>Warweg Automated Testing of Xbase++ Web Applications (R1)</td>
<td>Jordanova How VFP Developers can Start with Xbase++ (R2)</td>
<td>Granor You Mean I Have to Write About it, Too? (R2)</td>
<td>Borup Introduction to Microsoft Power BI (R2)</td>
<td>McGuinness Leveraging the Power of Amazon for Your Apps (R2)</td>
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<td>12:45 - 2:00</td>
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<tr>
<td>2:00 - 3:15</td>
<td>Gehrs-Pahl Service (and Controller) Applications (R2)</td>
<td>Pirsig Modernizing VFP Apps Using Xbase++ Transpiler (R2)</td>
<td>Wollenhaupt On the Dark Side of FoxPro (R2)</td>
<td>Selje OneNote to Rule Them All (R2)</td>
<td>Micromega Systems Foxfire!</td>
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<tr>
<td>3:30 - 4:45</td>
<td>Warweg New Desktop UI Controls Using HTML/CSS (R2)</td>
<td>Donnay Compiled Xbase++ Pages (CXP) (R2)</td>
<td>Schummer Challenges of the Independent Consultant (R2)</td>
<td>Strahl 10 Cool Examples of Using wwdotnetBridge (R2)</td>
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<td>4:45 - 5:15</td>
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<td>Refreshment Break (Desert Rose)</td>
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<tr>
<td>5:15 - 6:30</td>
<td>Pirsig Xbase++ Roadmap: What's Next!</td>
<td>Selje FoxUnit In Depth (R2)</td>
<td>Meyer SQL Server Execution Plans 101 (R2)</td>
<td>Hennig Creating Beautiful Web Sites Using Bootstrap (R2)</td>
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<td>8:30 - 9:45</td>
<td>Jordanova Make Your App Mobile (R2)</td>
<td>Donnay Case Study of a VFP to Xbase++ Conversion (R2)</td>
<td>Vinitsky Effective Training of Your End Users (R2)</td>
<td>Schummer XFRX vs. FoxyPreviewer (R2)</td>
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<tr>
<td>10:00 - 11:15</td>
<td>Gehrs-Pahl Geo-Coding and Mapping (R2)</td>
<td>Herdt Secure Data Exchange with SSL/TLSv3 in Xbase+ (R2)</td>
<td>Hennig Lessons Learned in Version Control (R2)</td>
<td>Meyer SQL Server Indexing for the Rest of Us (R2)</td>
<td>Gagne Adding Xbase++ to my VFP World (R2)</td>
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<td>11:30 - 12:45</td>
<td>Warweg Automated Testing of Xbase++ Web Applications (R2)</td>
<td>Donnay Working with XML in Xbase++ (R2)</td>
<td>Wollenhaupt The Security Cookbook (R2)</td>
<td>Vinitsky The Return of DbSchema (R2)</td>
<td>Strahl Creating Mobile Web Applications with Angular (R2)</td>
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<td>1:00 - 1:30</td>
<td><strong>Closing Presentation</strong> (Elliott/Flagstaff/Gilbert)</td>
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You 2.0

**Presenter:** Phil Sherwood  
**When:** Thursday, September 22, 7:00 - 8:30, Combined Elliott/Flagstaff/Gilbert

We all deal with technology and have figured out how to pick up new techniques and skills. The problem is that success or peak performance is 20% Mechanics and 80% Mindset. We've got the mechanics down but what about the mindset?

I've been a business owner for over 20 years and have always been on the lookout for ideas, techniques and skills to take my business to the next level. A couple of years ago, after talking with several successful entrepreneurs, I was encouraged to focus more on the internal, instead of the external. This led me to study how our mindset and limiting beliefs affect not only our business and careers but also our relationships.

Some of my influences in this quest have been Jim Rohn, Michael Hyatt, Napoleon Hill, Tony Robbins and Dan Kennedy.

This opening session will take a look at how our mindset affects everything we do from our careers to our relationships and how, by just making a few changes in how we think, we can get better performance and results in all areas of our lives.

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**Creating an App: My First Xbase++ Desktop Application, Part 1**

**Presenter:** Spyros Bobby Drakos and Andreas Herdt  
**Level:** Beginner, Intermediate  
**When:** Thursday, September 22, 9:00 - 12:00, Elliott

Coding concepts are important as any beginning programmer can attest to, but good programmers evolve from the real world journey of trial and error as they try to bring the ideas in their head to the screen.

This full-day pre-conference session will take us from a simple browser to a full-featured and functional piece of software. We will begin using an existing piece of code and accompanying executable that does nothing more than display database records on the screen. Attendees will be given a USB stick that contains all the code examples along with a copy of all the necessary files needed to create and run the application. After installing the software, we will quickly examine the existing browser and how it works. Attendees will then be shown how to import the existing code into the workbench where we will continue to develop the software using a combination of SGL and Xbase++ commands and functions.

Once we have successfully put together a robust browsing application, we will stretch the application's functionality and interface. Using more coding examples contained on the accompanying USB stick, we will use the
workbench to create a browser from scratch that will browse a different database. In order to reduce resources and leverage code, we will use the workbench to combine common functions from the two applications into a single .DLL. We will then combine the apps into a single full-featured and functional piece of software. All code examples will feature Xbase++ and SGL code. This approach is taken to show how quickly applications can be created. (How this code can be leveraged into a web application will be covered in greater detail in the Compiled Xbase++ Pages (CXP) session.)

The final part of the day focuses on yet another important part of the development cycle: debugging your application. Debugging is the process of finding the reason your code behaves differently than you expect. As a practical example, a number of issues which were intentionally added to the sample application will be found and corrected in the course of this session. Attendees will learn how to use the various debugger features and see why the integration of the debugger with the source code editor makes them more productive.

You will learn:

- How to import existing code
- The purpose of the .XPJ file
- How to code using Hungarian notation
- How to make code readable
- How to break up code into component parts
- How to create Tab Pages, Buttons and interactive Dialog screens
- Simple ways to run processes in different threads
- How to manage and edit database records through record object
- How to create pop-up menus and using multiple modal and non-modal windows
- How to use the workbench to create software from scratch
- How to use the workbench to create DLL’s
- How to use the workbench to browse multiple sources including the .XPJ
- How breakpoints stop your application under certain conditions and how they can be used to create trace files for later analysis
- How to inspect public, private, and local variables, as well as the member variables of objects
- How to evaluate any expression in the context of your application
- How to debug a specific thread
- How to use watchpoints and manage your breakpoints
- How the Xbase++ debugger supports multi-threading, and therefore allows you to control program execution
- How to break into a running application instead of starting the application under the debugger’s control

Prerequisites: None
Hands-on Branching and Merging with Distributed Version Control Systems

Presenter: Rick Borup  
Level: Intermediate, Advanced  
When: Thursday, September 22, 9:00 - 12:00, Flagstaff

Distributed version control systems: You've heard about them. You've read about them. You've attended some conference sessions. Maybe you've downloaded and installed one, and perhaps you're actually even using it. But for a lot of developers, version control systems are still a strange and scary place when you get past the basics, especially when it comes to branching and merging. What you really want is a hands-on educational experience where you can learn by doing instead of just by watching and listening. If this describes your current relationship with version control, this pre-conference session is for you! Bring your laptop and be ready to work through a series of structured exercises designed to ease your fears and take you to a whole new level of comfort and proficiency with your version control system.

You will learn:

- What distributed version control systems are all about
- The theory behind branching and merging
- How to use SourceTree and TortoiseHg
- How and when to create branches
- How and when to perform merges, and how to resolve conflicts
- How to use a remote repository for solo and/or team development
- How to use the VFPX FoxBin2Prg tool
- How to use the HgFlow / GitFlow approach to branching and merging

Prerequisites: Some experience with Mercurial or Git is required. A laptop computer running Windows® 7, 8.1, or 10 is required for the exercises. Attendees will be asked to pre-install TortoiseHg and SourceTree on their laptops (both are free, and instructions will be provided in advance).

Learn to Use SQL

Presenter: Tamar E. Granor  
Level: All levels  
When: Thursday, September 22, 1:00 - 4:00, Flagstaff

SQL (Structured Query Language) offers a powerful, set-oriented approach to working with data that is quite different from the traditional record-oriented Xbase++ techniques. This pre-conference session covers the basic SQL commands, from ALTER TABLE to UPDATE. We’ll see how to use SQL to create and manage databases and tables, see the power of SQL for querying data, and look at adding, updating and removing data with SQL. We’ll look at some of the differences between the dialects supported by Visual FoxPro, SQL Server, and PostgreSQL.
You will learn:

- How to create and modify tables and cursors with SQL commands
- How SQL SELECT makes it easy to extract the data you want
- How to add, remove and update data in SQL
- How various versions of SQL differ

Prerequisites: None

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### Conference Sessions

#### 10 Cool Examples of Using wwDotnetBridge to Extend Your FoxPro Code

**Presenter:** Rick Strahl  
**Level:** All levels  
**When:** Friday, September 23, 10:00 - 11:15, Flagstaff (R1)  
Saturday, September 24, 3:30 - 4:45, Flagstaff (R2)

wwDotnetBridge lets you call just about any .NET code directly from FoxPro and helps overcome most of the limitations of regular .NET COM interop. Using this small library opens up a number of opportunities to interface with .NET functionality that wouldn't otherwise be available. In this talk, you'll see 10 (or more, depending on time) small, ready to use and practical examples that demonstrate how you can integrate with .NET and use many open source libraries that are available for performing a host of useful everyday tasks that would be difficult or impossible to achieve natively in FoxPro.

You will learn:

- What wwDotnetBridge is and how it works  
- About the wealth of .NET components ready to be integrated with FoxPro  
- About many implementation examples of wwDotnetBridge in FoxPro  
- About different approaches to integration  
- How to create a simple .NET component and call it with wwDotnetBridge  
- Many ideas how to leverage this technology in your apps

Prerequisites: Familiarity with COM in Visual FoxPro, some familiarity with .NET

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### Adding Xbase++ to my VFP World

**Presenter:** Alec Gagne  
**Level:** Beginner  
**When:** Friday, September 23, 10:00 - 11:15, Gilbert (R1)  
Sunday, September 25, 10:00 - 11:15, Gilbert (R2)

Many of us with legacy VFP-based applications find ourselves at crossroads regarding the future of our respective products and businesses. With our favorite development tool being supported only through the VFP user community and the world of technology moving very rapidly in several different directions, many of us have
wondered what to do or where to go next. The complexity and cost associated with rewriting our respective products in another language seems to be a daunting endeavor.

However, the task need not be an all or nothing proposition. The Xbase++ development platform continues to evolve and encompass more of the capability and functionality that we VFP developers know and love. Thus, other than choosing to do nothing at all, the transition to Xbase++ seems to be the path of least resistance for us die-hard VFP developers looking to protect our future.

In this session we will look at Xbase++ from a VFP perspective and discuss strategies for co-mingling both VFP and Xbase++ based applications as part of an overall solution. We will also discuss both technical and business case reasons why you should consider such a transition.

You will learn:

- How the transition task can be broken into smaller pieces
- Strategies for extending VFP with programs created using Xbase++
- Nuances and differences between Xbase++ and VFP 9
- Strengths and weaknesses of Xbase++ vs. VFP9 development platform
- Distribution of Xbase++ and VFP applications together

Prerequisites: None

Automated Testing of Xbase++ Web Applications

Presenter: Till Warweg
Level: All levels
When: Saturday, September 24, 11:30 - 12:45, Bisbee (R1)
Sunday, September 25, 11:30 - 12:45, Bisbee (R2)

Testing software to ensure product quality, both during and after the development process, has been a hot topic in recent years. However, although well-established concepts such as unit testing help to ensure the correctness of your code, testing the UI layer of an application tends to be more problematic. This session introduces Selenium, an open source system for automating the testing of Web applications. The topics covered in this session range from installing the Selenium framework to writing your first test case for automating a CXP application.

You will learn:

- About Selenium as a tool for creating automated tests for Web applications
- How to install and set up Selenium on your development machine
- The prerequisites and best practices for writing testable Web front-ends

Prerequisites: Basic knowledge of programming with CXP, basic HTML/CSS knowledge
**Case Study of a VFP to Xbase++ Conversion**

**Presenter:** Roger Donnay  
**Level:** Beginner  
**When:** Friday, September 23, 2:00 - 3:15, Arizona (R1)  
Sunday, September 25, 8:30 - 9:45, Arizona (R2)

This session is a discussion of how Xbase++ and an SGL language extension simplified the conversion of a Visual FoxPro application to Xbase++. This is a case study of how an actual conversion, completed this year, was accomplished in a very short period of time. The company who hired me to help with the conversion had been in business for many years and chose one of their many VFP applications as a feasibility test. They were happy enough with the results to deploy the new Xbase++ application to their customers.

Attendees will receive a free copy of the SGL system that was used for the conversion. The source of the finished application will be available for review with a comparison of the finished VFP application to the finished Xbase++ application. There will be additional commentary from the VFP developer about their experiences during the process.

You will learn:

- The appropriate steps in performing a conversion  
- What type of VFP applications can be easily converted using this technique  
- What VFP developers need to know about Xbase++ when converting  
- What VFP developers need to know about SGL programming

**Challenges of the Independent Consultant**

**Presenter:** Rick Schummer  
**Level:** All levels  
**When:** Friday, September 23, 2:00 - 3:15, Elliott (R1)  
Saturday, September 24, 3:30 - 4:45, Elliott (R2)

Every session I've seen at conferences about making the move from corporate developer working for "the man/woman" to being an independent consultant and being "the man/woman" has been delivered through rose-colored glasses. Everything is unicorns and green grass on the other side of the fence. You'll be rich, work fewer hours, and instantly build a company someone will want to buy from you for an over-inflated amount of cash. Listening to these sessions, who would not want to make the move? I've listened to the sessions and learned a few things from them. I've seen developers make the jump. I've seen some of them succeed and others fail.

It turns out I had to do this twice to get it right myself, and even today I know for sure I am not getting it all right. I still have things to learn from others and from experience. The lessons from the school of black and blue are hard-fought wins. The generally accepted idea that it's best to learn from your mistakes is an educational path I try to avoid, but I have proven that you can make it work, even if you are not perfect.
This session is about lessons learned, things to consider if you are an independent consultant or running a consulting firm, and things to consider if you are thinking about becoming an independent consultant. You may even learn that it is not right for you.

Because the session is limited to 75 minutes, it won't be possible to cover everything I've learned about this topic; the exact content of the session will, in part, be driven by the audience. Core topics include balancing billable vs. non-billable time, how to find more work, why cash flow is king, and marketing yourself and the business. It is also important to understand why setting up the business's legal infrastructure is not something you want to do casually. The financials are everything, right? What, no? We'll discuss partnership vs. making a go of it yourself. I'll also share one of the keys to success for me: strategic outsourcing of adminstrivia.

We'll also look at networking, partnering with others, and making sure you get paid for the risks you take and the hard work you put into the business. That of course leads to discussions about the risks involved and how much work it takes to run the business. Finally, we'll consider what you do when you become so successful that you need others to help you accomplish even more goodness for your growing customer base. So many lessons to share, and so many lessons still to learn.

I'll ask others attending the session to share their ideas too. An interactive session on this topic is sure to benefit everyone in attendance.

You will learn:

- Lessons from my school of black and blue
- Why you may want to be your own person
- Why working for someone else who encourages a team to be entrepreneurial might be better
- About challenges people might not mention
- That there is a lot more to running a consulting firm than writing code all day long

Prerequisites: None

**Compiled Xbase++ Pages (CXP)**

**Presenter:** Roger Donnay  
**Level:** Intermediate  
**When:** Friday, September 23, 10:00 - 11:15, Arizona (R1)  
Saturday, September 24, 3:30 - 4:45, Arizona (R2)

Compiled Xbase++ Pages (CXP) is a build and execution infrastructure that allows programmers to create powerful dynamic web sites. CXP is a server-based language similar to ASP and PHP except that it supports all the features of the Xbase++ language and therefore makes it possible to adapt existing Xbase++ applications to the web.

Attendees will receive source code for a CXP web server, written in Xbase++, that does not require IIS or Apache. There will be a full discussion of the advantages of using this technique including how to use your custom CXP server to send messages to a remote Trace client program for monitoring your application activities. Discussion will include many tips, techniques, and sample programs that make getting started with CXP much easier. Attendees will also receive source code for a Trace Client program that remotely communicates with the CXP server.
You will learn:

- How to set up a server to use compiled pages
- How to install and configure APACHE or IIS for CXP
- How to set up an Xbase++ environment for use with CXP
- About sample CXP programs that deliver dynamic HTML, CSS and Javascript
- The basics of CXP programming
- How CXP compares to scripting languages such as PHP or ASP
- How to use your own function libraries with CXP
- How to manage CXP error handling
- How to create your own CXP server that does not require IIS or Apache

Prerequisites: Some experience with HTML and CSS

Creating Beautiful Web Sites Easily Using Bootstrap

**Presenter:** Doug Hennig  
**Level:** All levels  
**When:** Friday, September 23, 11:30 - 12:45, Gilbert (R1)  
Saturday, September 24, 5:15 - 6:30, Gilbert (R2)

Laying out a web page using HTML and CSS can be challenging. Do you use the older table mechanism or CSS floats to place objects side-by-side? How do you deal with differences in browsers? And what about handling different devices: phones, tablets, laptops, and desktops?

Bootstrap is a free, open source framework for developing responsive, mobile-first web sites. It solves many problems web developers typically face and makes it easy to create beautiful web sites in record time, even for inexperienced developers.

This session shows how to get started with Bootstrap, examines using its grid system to easily layout your page elements, and discusses how Bootstrap components add attractive and functional elements to your web site. We'll do a "makeover" of a real web site to show how easy it is to make it more attractive, functional, and mobile-friendly.

You will learn:

- Where to download Bootstrap and related resources
- How to add Bootstrap to your web site
- How to work with Bootstrap's grid system
- How to use Bootstrap components and themes

Prerequisites: Basic knowledge of HTML and CSS
Creating Mobile Web Applications with AngularJS 2 and Web Connection

**Presenter:** Rick Strahl  
**Level:** All levels  
**When:** Friday, September 23, 3:30 - 4:45, Gilbert (R1)  
Sunday, September 25, 11:30 - 12:45, Gilbert (R2)

Mobile and rich client applications continue to be in high demand and this session describes how to build mobile applications based on Web technologies that can run either on the Web in a Web Browser or on device using hybrid technology like Cordova. We'll look at a small application that runs both on the Web and from a device and interacts with a Visual FoxPro based JSON service on the server using Web Connection. You'll see what's involved in building rich client side interactivity using the new version AngularJS 2 and the Bootstrap CSS framework as well how to build service interfaces that can provide the data to provide to the front end application.

You will learn:

- How to create REST Services that accept and return JSON with FoxPro (and Web Connection)
- How to create client interfaces using the new AngularJS 2 JavaScript framework
- How to create Web sites that work responsively on desktop down to mobile
- How to use the Bootstrap CSS framework
- How to create applications that can run in the browser and as mobile apps
- How to use Cordova to create mobile apps

**Prerequisites:** Some familiarity with HTML, JavaScript and CSS


Don't Press That Button! Effective Training of Your End Users

**Presenter:** Tuvia Vinitsky  
**Level:** All levels  
**When:** Friday, September 23, 10:00 - 11:15, Elliott (R1)  
Sunday, September 25, 8:30 - 9:45, Elliott (R2)

End user training is a critical component of a successful software deployment. Yet too often the training process is an afterthought. Training may be an art, but it is also a science. Experts in Instructional Technology have studied the most effective training methods. Delivering a stunning VFP app is only half the battle. In this session Tuvia Vinitsky takes you through the process of designing and implementing effective end user training.

You will learn:

- About the training goal plan
- How to determine how much time to spend overall and on each section of the application
- About the best training schedules
- About the size of training groups
- Computer equipment essentials for effective training
- What materials should be provided to the end users during training
- How to evaluate the success of a training session
Buy-ins
Who gets trained on what
Dealing with managers who resist training

Prerequisites: Experience teaching or training end users

**FoxUnit In Depth**

**Presenter:** Eric J. Selje  
**Level:** All levels  
**When:** Friday, September 23, 3:30 - 4:45, Elliott (R1)  
Saturday, September 24, 5:15 - 6:30, Elliott (R2)

You've got years and years of legacy code to maintain. How can you be sure you’re making changes without breaking everything and putting your company and your reputation at risk?

In this session we'll review what Unit Testing is, why you should be doing it, and how to use the VFPX tool FoxUnit to perform unit tests on your code. If it's been a while since you've looked at FoxUnit, you may be pleasantly surprised at how many new features have been added in the last few years, thanks to multiple contributors in the Fox family.

Refactor that code with confidence with FoxUnit!

You will learn:

- What unit testing and TDD are
- Why you should be doing it
- What is FoxUnit
- How to write Unit Tests in FoxUnit
- How to integrate FoxUnit into a continuous integration cycle

Prerequisites: FoxPro coding experience

**How VFP Developers can Start with Xbase++**

**Presenter:** Venelina E. Jordanova  
**Level:** Beginner  
**When:** Friday, September 23, 8:30 - 9:45, Arizona (R1)  
Saturday, September 24, 11:30 - 12:45, Arizona (R2)

Do you love VFP? I do! And it is still the love of my life (together with my favorite sport, which I've been doing even longer). I'm an old fox-er and I still have many customers using my old VFP applications. Complaining about what Microsoft has done with our favorite language will not help. We have to go forward; we must look into the future. For a long time, I have looked at many different languages and technologies. In that list are both technologies from Microsoft and open-source technologies. Yes, they are used by many developers and they work. Yes, they have a wide range of implementation. However, I always come to a situation where I think “This could be solved better and faster in VFP.” I still hope to find my “future” technology—the one which will be at least as good as VFP was.
In this session, we will see the features that Xbase++ offers us from the point of view of a VFP developer. We will see what is similar and what is different to the language we are used to. We will have a look at the development environment and the tools for developers to speed up the development process. And last, but not least, we will see how VFP applications can have a new long life, thanks to Xbase++.

You will learn:

- What is important to know about Xbase++
- How to develop a new Xbase++ project: how to access data, how to build a user interface, where to write business logic code.
- What tools help in the development process
- How to give old applications new life using Xbase++

Prerequisites: None

**Introduction to Microsoft Power BI**

**Presenter:** Rick Borup  
**Level:** All levels  
**When:** Friday, September 23, 3:30 - 4:45, Flagstaff (R1)  
Saturday, September 24, 11:30 - 12:45, Flagstaff (R2)

Power BI (Business Intelligence) is Microsoft’s newest suite of tools for transforming your data into reports and visual presentations. It’s available both as an online service and as a Windows desktop application, and works with a wide variety of data sources. Tools such as Power Pivot, Power Query, and Power View are integrated with Microsoft Excel, making it easy for almost anyone to get started. But beyond the basics, non-technical users will likely turn to software developers and consultants for help. The Power BI REST API enables developers to push data from an application directly into a Power BI dataset for real-time updates. This session introduces Power BI and explores how you can learn to use it to create great reports and visuals from your data.

Note: This session will focus less on Excel and more on the newer Power BI Desktop app.

You will learn:

- What Power BI is and how to get it
- How to use the Power BI desktop app
- About the Power BI tools that integrate with Microsoft Excel
- How to import data into Power BI
- How to create a data model
- How to create reports and visuals representations of the data

Prerequisites: None
Lessons Learned in Version Control

**Presenter:** Doug Hennig  
**Level:** Intermediate, Advanced  
**When:** Saturday, September 24, 8:30 - 9:45, Elliott (R1)  
Sunday, September 25, 10:00 - 11:15, Elliott (R2)

Rick Borup’s sessions at previous Southwest Fox conferences really helped me get started using version control for my application development. Since then, I’ve made a ton of mistakes and learned a lot of lessons the hard way. This session discusses what has evolved into my team's best practices for version control. It’s intended for those who are familiar with version control but are looking for ideas about how to improve their processes.

You will learn:

- What to include in and what to exclude from the repository  
- When to commit  
- When to branch  
- About handling multi-developer, multi-branch scenarios  
- About handling merge problems  
- Workflow processes dealing with version control

**Prerequisites:** Some experience working with version control (the examples use Mercurial)

Leveraging the Power of Amazon for Your FoxPro and Xbase++ Applications

**Presenter:** Chris McGuinness  
**Level:** All levels  
**When:** Friday, September 23, 2:00 - 3:15, Gilbert (R1)  
Saturday, September 24, 11:30 - 12:45, Gilbert (R2)

This session is a walk-through of real-world examples where Amazon’s infrastructure-as-a-service is leveraged using the Remote Application capabilities of the Remote Desktop Protocol allowing you to push FoxPro/Xbase++ based applications to your client’s desktops in a seamless fashion.

**Topics include:**

- Basic architecture and concepts  
- Server provisioning  
- Application instancing/installation  
- Workstation/device considerations (tablets, Macs, HTML RDP clients, etc)  
- Security disaster recovery  
- Licensing  
- Cost models (gaming AWS pricing)  
- Advantages, pitfalls, etc...
You will learn:

- Terminal services remote application architecture and concepts
- About Amazon EC2 infrastructure-as-a-service offerings and implementation
- How to combine terminal services with Amazon to deliver your classic windows applications
- Advantages and pitfalls of this approach

Prerequisites: None

Make Your App Mobile

**Presenter:** Venelina E. Jordanova  
**Level:** Intermediate, Advanced  
**When:** Friday, September 23, 11:30 - 12:45, Bisbee (R1)  
Sunday, September 25, 8:30 - 9:45, Bisbee (R2)

The world moves and nowadays we need to handle more and more tasks. So do our customers. According to research, 64% of American adults now own a smartphone. All smartphone owners use their phones to go online and 34% of internet users go online mostly using their phones, and not using some other device such as a desktop or laptop computer. Is the smartphone the PC of the next generation? In any case, we often face the need to provide some part of our applications as mobile apps. Of course, this is not the full functional desktop application, but in most cases, it gives the end-users the chance to enter data immediately instead of making notes and entering them later in the office, and provides some instant reports and statistical data that is very useful.

In this session, I will demonstrate how to build a simple web server, accessing and providing the required data over a remote connection using the JSON data exchange format. The next part of the demonstration will be a simple HTML 5 page consuming the data as well as a simple mobile application, working with same data, editing them and updating the database behind.

You will learn:

- How to develop a web server providing data in JSON format
- How to process different data types
- How to develop an HTML 5 application consuming JSON data
- How to develop a mobile application consuming JSON data
- How to receive data changes in JSON format and update the database
- How to make temporary mobile storage in an SQLite database

Prerequisites: Understanding of web services
Modernizing Visual FoxPro Applications Using the Xbase++ Transpiler

**Presenter:** Steffen F. Pirsig  
**Level:** All levels  
**When:** Friday, September 23, 11:30 - 12:45, Arizona (R1)  
Saturday, September 24, 2:00 - 3:15, Arizona (R2)

This session is intended for Visual FoxPro developers who want to give their existing solutions a new future while avoiding the time-consuming and cost-prohibitive approach of rewriting their applications.

We will first develop a basic understanding of the modernization process, moving a Visual FoxPro solution to Xbase++, utilizing the transpiler. Based on a sample application developed with Visual FoxPro, we will learn how the original VFP source code gets transpiled into Xbase++ code. We will not only see the differences, but also the similarities in the code, which are fortunately in the majority.

However, source code is often very complex and developers sometimes use clever tricks when writing code or using language features. Consequently, there are some situations where the automated transpilation process may fail. We will look into problematic Visual FoxPro coding patterns and examine which features the transpiler provides to the Visual FoxPro developer for dealing with them.

We will close the session with a couple of scenarios, showing how to add value to a Visual FoxPro application after moving it over to the Xbase++ platform.

You will learn:

- How to use the transpiler to transform Visual FoxPro PRG/VCX code into Xbase++ PRG code
- The limitations of the transpiler and how to work around them
- How to maintain VFP and Xbase++ applications using the same source code
- About modernization project planning and best practices to succeed
- How to add value to modernized VFP applications

**Prerequisites:** Visual FoxPro experience, multiple man years of investment into a VFP application, an open mind; thinking forward

New Desktop User Interface Controls Using HTML/CSS

**Presenter:** Till Warweg  
**Level:** All levels  
**When:** Friday, September 23, 8:30 - 9:45, Bisbee (R1)  
Saturday, September 24, 3:30 - 4:45, Bisbee (R2)

HTML and CSS have figured prominently in recent years as a new technology for creating appealing user interfaces in desktop applications. Starting with Xbase++ 2.0, developers can begin utilizing HTML and CSS to create their own user interface controls. From specialized button classes, to list boxes for visualizing images and textual data, to collapsible controls for grouping UI elements, Alaska is planning to release a number of new controls based on HTML and CSS in the next few years. This session will give an overview of the controls that Alaska Software has developed by the time of the conference. Also, practical use-cases will be demonstrated to give you a better idea of how, where, and when to incorporate the new user interface components in your desktop applications.
You will learn:

- Which new controls are already available for use in your desktop applications, and which controls will become available shortly
- How to add these controls to your projects
- About use-cases for utilizing HTML and CSS in desktop applications
- Why the controls will be released as source code instead of a runtime DLL, and the advantages of this deployment model

Prerequisites: Basic knowledge of programming with Xbase++, basic HTML/CSS knowledge

**On the Dark Side of FoxPro**

**Presenter:** Christof Wollenhaupt  
**Level:** All levels  
**When:** Friday, September 23, 8:30 - 9:45, Elliott (R1)  
Saturday, September 24, 2:00 - 3:15, Elliott (R2)

Visual FoxPro is a lot: it’s fast, productive, stable, amazing, surprising... but it certainly isn't logical and consistent. Three decades with three fundamentally different programming concepts, four operating systems and two compilers left their traces in the product we love. FoxPro as a high-level development tool doesn't require knowledge of the internals, much less than .NET or JavaScript do. But should you encounter problems it’s helpful to know a bit about what's going on behind the scenes. This session covers the internal management of variables, memory management, the handling of classes, objects and containers (and why those are the same, yet completely different), the system datasession, the impact of cache, buffers and transactions, table access, Rushmore optimization, and so on.

During the development of Guineu I learned even more details of FoxPro's inner working that are added to this new version of the session, e.g. how filters are not always what they seem and how the various FoxPro runtimes differ in sometimes subtle ways.

You will learn:

- How variables are managed
- How memory and buffers are managed
- How VFP deals with objects
- How to avoid problems with a buffer
- What to consider with Rushmore

Prerequisites: None
OneNote to Rule Them All

**Presenter:** Eric J. Selje  
**Level:** All levels  
**When:** Friday, September 23, 11:30 - 12:45, Flagstaff (R1)  
Saturday, September 24, 2:00 - 3:15, Flagstaff (R2)

You may know OneNote is a pretty convenient place to keep information. But with its ability to store text, graphics, audio, video, hyperlinks, along with its sharing and replication features, OneNote can be used in ways you may not have thought of! For example, you could deliver a complete portfolio of reports to all of your managers in OneNote, which they can then collaboratively markup. Putting together a meeting and want to create a dynamic attendee guide? Forget about static PDFs; OneNote can do that for you! And the best part is that you can control it all from within Visual FoxPro using OneNote’s REST API, so you can move your data from VFP to OneNote.

You will learn:

- Fundamentals of OneNote
- That OneNote is actually a NoSQL database with replication and collaboration features
- How to use REST calls from within VFP to populate OneNote

**Prerequisites:** None

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SQL Server Execution Plans 101

**Presenter:** Jody L. Meyer  
**Level:** Beginner  
**When:** Friday, September 23, 8:30 - 9:45, Flagstaff (R1)  
Saturday, September 24, 5:15 - 6:30, Flagstaff (R2)

I am a VFP developer through and through. But... times are changing and I have found myself writing VFP front-ends to SQL Server back-ends. There have been times where the passed-through T-SQL code runs extremely fast and other times... not so much. Why?

Well, there are tools such as the SQL Server Execution Plan to help you resolve questions like speed issues. SQL Server creates and saves these Execution Plans for future use. SQL Server Management Studio gives us a way to look at these Execution Plans graphically and save them so we can share with other developers. In doing so, we can then work together to come up with the best solution for faster speed.

So, do you want to answer questions like:

- Why is my T-SQL query running slow?  
- Is SQL Server using the indexes?  
- Why isn’t SQL Server using an index?  
- Are there tools out there to help me determine this?

Most SQL Server developers and administrators will tell you, “It depends”. Execution Plans show you what’s going on behind the scenes in SQL Server. The plans can provide you with a wealth of information on how SQL Server is executing your queries, including: which indexes are getting used or not used, how the data is being retrieved and
joined, how aggregations in GROUP BY queries are put together, anticipated load, and the estimated cost of all the operations.

Execution Plans are a great addition to the tool belt of a developer. Understanding what they are telling you goes a long way to answering many of those why questions and leads you to better performance.

You will learn:

- How SQL Server uses Estimated and Actual Execution Plans
- How to read these Execution Plans
- How to tweak your indexes and T-SQL for better performance
- How to export an Execution Plan
- About tools other than SSMS to explore Execution Plans

Prerequisites: Some SQL Server experience

**SQL Server Indexing for the Rest of Us**

**Presenter:** Jody L. Meyer  
**Level:** Beginner  
**When:** Saturday, September 24, 10:00 - 11:15, Flagstaff (R1)  
Sunday, September 25, 10:00 - 11:15, Flagstaff (R2)

SQL Server indexing can be a bit of mystery. Having gone to a number of SQL Saturdays, I hear the experts say that we shouldn’t have a lot of indexes and there may never be a perfect index for any given situation. However, for high performance, SQL Server should use an index to seek against the data instead of using a scan. There are numerous books, articles, blogs, and sessions (much like this one) on just SQL Server Indexing. It can all be a bit confusing. So, in this session, you’ll get to know SQL Server indexing a bit better. We will explore indexing fundamentals. This session lays the groundwork for a solid foundation on some of the primary index types such as Heap, Clustered Indexes, and Nonclustered Indexes. We will explore what they are and how to build, alter and drop them. We will also explore the options available that can change the structure of indexes, such as fill factor and included columns.

SQL Server provides information on indexes through its metadata. It’s important to understand what kind of information is available and where to find it. SQL Server also stores and uses statistical information on the available indexes, which provides insight into how SQL Server can and is using indexes. It provides the information needed to decipher why an index may or may not be selected for use.

We will also cover best practices. What do the experts say we should do? There are a lot of myths out there, too. We will look at a number of those.

SQL Server indexes require maintenance because, over time, performance benefits can wane, or through data modification, their sizes and the underlying statistics can bloat. We will look at a number of areas to consider: index fragmentation, heap bloat and forwarding, statistics, and in-memory statistics.

This session explores some index strategies: how and when to apply indexes to tables by walking through a number of patterns to help identify potential indexes. But having the indexes is only half the battle. We need to
consider how we can use them to their fullest potential through query strategies. We will explore the effect that queries can have on whether indexes are being used and provide the expected performance improvements.

You will walk away with a better understanding of SQL Server’s indexing and how to use it like a pro!

You will learn:

- Indexing fundamentals
- Metadata and statistics
- Best practices and myths
- Indexing maintenance
- Indexing strategies
- Query strategies

Prerequisites: Some SQL Server experience

Secure Data Exchange with SSL/TLSv3 in Xbase++

**Presenter:** Andreas Herdt  
**Level:** All levels  
**When:** Friday, September 23, 2:00 - 3:15, Bisbee (R1) 
Sunday, September 25, 10:00 - 11:15, Arizona (R2)

Nowadays, network communications need to be secure. SSL/TLSv3 is the standard for encrypting data over TCP/IP and is now supported by Xbase++ on the client and server side. While using these technologies on the client side is easy and only requires a connection, ensuring that your WebHandlers and WebSocketHandlers are able to accept secure connections needs a basic understanding of the Windows platform-specific certificate infrastructure. For example, an SSL certificate must first be obtained and then installed on the server machine. In this session, attendees will get all the background information required for setting up and using secure SSL data exchanges between client and server machines.

You will learn:

- How to create applications that use SSL on the client and server side
- What SSL certificates are and what certificate types exist
- How to install and use SSL certificates from Xbase++

Prerequisites: Basic knowledge of programming with Xbase++, Visual FoxPro, or Clipper. Basic knowledge about Web Technologies is a plus.
The Return of DbSchema

Presenter: Tuvia Vinitsky
Level: All levels
When: Friday, September 23, 2:00 - 3:15, Flagstaff (R1)
Sunday, September 25, 11:30 - 12:45, Flagstaff (R2)

Last year at Southwest Fox, the SQL design application DbSchema made a big splash. Now the splash has become a tidal wave. Why? What changed in a year? The creators of DbSchema were so pleased with the response from VFP developers that they have added built-in support for VFP!

VFP developers have always had strong WYSIWYG tools available for creating and designing native VFP databases. But moving to SQL Server meant using SQL Server Management Studio or similar tools—or even just using the command line. All that has changed with the product dbSchema. Now you can design databases visually, manages joins, triggers, stored procedures, and more, all from an intuitive interface.

DbSchema does not stop there! Compare and update schemas between databases or between designs and live databases. Coordinate multiple database design staff. Organize and manage sub-layouts and layout slices, design queries and run them interactively, and edit data almost like the VFP Browse and Command window!

Life with SQL Server just got a lot easier. And so did life with VFP.

Use DbSchema to compare, design, analyze, set up, and manage SQL Server as well as VFP. Not only is DbSchema the design tool VFP has always needed, now you can seamlessly move between database platforms!

This session will demonstrate how to use the dbSchema tool to create and manage SQL Server and VFP databases, queries, data, and designs.

You will learn:

- What functionality dbSchema provides
- How to create databases, tables, triggers, and stored procedures
- How to work with layouts
- How to work with a schema offline and live
- How to produce documentation
- Schema management
- How to update servers and designs from each other
- Data management via dbSchema
- Integrating VFP into DbSchema

Prerequisites: Knowledge of database design in SQL Server and/or VFP
The Security Cookbook

**Presenter:** Christof Wollenhaupt  
**Level:** All levels  
**When:** Saturday, September 24, 10:00 - 11:15, Elliott (R1)  
Sunday, September 25, 11:30 - 12:45, Elliott (R2)

In this PowerPoint-free session, we talk about practical implementations in the broad area of security. Countless code samples—all available to you—cover various aspects around security:

- How to implement a secure login dialog
- How to use the CryptoAPI
- How to encrypt and sign data
- How to check files for manipulations
- How to harden an application against invalid input
- How to use the report designer securely
- How to protect your application against code theft
- How to transfer data securely
- What you have to consider when accessing a SQL server
- What to consider with distributed applications

All samples can easily be modified to suit your own needs and to increase the security in your application.

You will learn:

- What security risks you face as a developer
- How to use various security related technologies

**Prerequisites:** None

The Xbase++ Coding Adventure: Increase Your Programming Skills

**Presenter:** Spyros Bobby Drakos  
**Level:** All levels  
**When:** Saturday, September 24, 10:00 - 11:15, Arizona

Train your development and language skills with code katas. A code kata is a given programming task of manageable size which is solved by the developer many times in a repetitive manner. The developer tries to find a better solution with each run. The goal is not the final code or solution, the goal of a code kata is the process and the learning from others as well as the learning from mistakes.

Examples of suitable programming tasks are:

- Count characters in string and return array of chars with count
- Close all workareas opened by callee
- Create a function which translates decimal numbers into Roman numbers
We will run the code kata as a group. Two developers are nominated to start with the task and act effectively as a pair with one writing on the keyboard and the co-pilot issuing commands. Attendees are allowed to make suggestions as they go but should allow the pair time and space to proceed with the exercises. The group rotates each 10 minutes so everyone gets a turn.

Again, at each run the pairs will find better ways of solving the problem. Code katas aren’t about finding perfect solutions: the journey itself is your reward.

You will learn:

- Better coding
- To rethink existing approaches

Prerequisites: Installed copy of Xbase++ 2.0, of course, and a laptop

The Xbase++ Coding Adventure: Increase Your Programming Skills

Presenter: Steffen F. Pirsig
Level: All levels
When: Saturday, September 24, 10:00 - 11:15, Arizona

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- Better coding
- To rethink existing approaches

Prerequisites: Installed copy of Xbase++ 2.0, of course, and a laptop
Visual FoxPro Reporting: XFRX vs. FoxyPreviewer

Presenter: Rick Schummer
Level: All levels
When: Saturday, September 24, 8:30 - 9:45, Flagstaff (R1)
Sunday, September 25, 8:30 - 9:45, Flagstaff (R2)

XFRX has been around as a third party report preview replacement since 2001 and is considered one of the top-tier commercial add-on tools for improving the user experience with reporting in a Visual FoxPro application (version 5.0 to 9.0). A lot of developers I know purchased XFRX to incorporate PDF generation in their applications. The Report Preview capability however is awesome. It extends the previewer with a text search and the ability to export to various output formats. Eqeus most recently added the ability to preview reports in a Web browser with their new Web-based extension.

FoxyPreviewer is an open source project on CodePlex that also replaces the Visual FoxPro report preview. It extends the previewer with a search capability by previewing miniature pages, a text search, a printer selection dropdown, the number of copies you want printed, the ability to export to various output formats, and emailing a report to someone. Overall it is an impressive replacement, but like XFRX, it is more than just a previewer.

This session could go down as the battle of the report previewers, but the truth is, there is so much more to both of these Visual FoxPro report add-ons. During the 75 minutes, you will learn from someone who likes both products and has used both tools in production applications. There are differences in approaches, outputs, Visual FoxPro versions supported, toolbar features, implementation, licensing, and deployment strategies. The general idea of this session is to give you a good perspective on both tools, to show you how they are similar and different so you can understand which one is good for your existing and future products.

You will learn:

• What it takes to integrate each of the reporting tools into a Visual FoxPro application
• The advantages and disadvantages of FoxyPreviewer
• The advantages and disadvantages of XFRX
• How you can skip the previewer and leverage the output file capabilities
• The implementation and deployment strategies involved
• How to determine the costs to you as a developer and your customers

Prerequisites: An understanding of Visual FoxPro's reporting is beneficial.

Working with XML in Xbase++

Presenter: Roger Donnay
Level: Intermediate
When: Saturday, September 24, 8:30 - 9:45, Arizona (R1)
Sunday, September 25, 11:30 - 12:45, Arizona (R2)

More and more Xbase++ developers need to deal with XML in their applications. As systems go paperless, the electronic transfer of information becomes more and more relevant. This transfer of information is most often in the form of XML.
This session discusses concepts for dealing with XML both from the need to parse XML data into existing applications to the need to generate XML to send to other applications. Attendees will receive source code for an XmlNode class that has methods for reading, writing, managing and creating XML streams.

You will learn:

- The basics of XML format
- How to use the Xbase++ XML parser
- How to use the XmlNode class
- How to convert DBF data to XML and vice-versa
- How to convert objects and arrays to XML and vice-versa
- How to work with an XML tree as a set of objects
- Understanding SOAP and WSDL

Prerequisites: None

Xbase++ Code Shrink: Review Your Code in a Team

**Presenter:** Spyros Bobby Drakos and Steffen F. Pirsig  
**Level:** All levels  
**When:** Friday, September 23, 3:30 - 4:45, Arizona

Do you have some code that you want to run faster, create lesser workload, or become smaller? In a code shrink, all attendees work together on reviewing the code at hand. Topics like performance pitfalls, code readability, and the approach taken in the implementation will be examined and alternative coding solutions will be suggested if needed.

We do not judge the code, we simply try to make it better! In fact, the code shrink code review is an excellent learning experience for both the experienced developer and the beginner.

You will learn:

- Best practices
- The benefit of a coding standard
- From each other

Prerequisites: Xbase++ 2.0 or Visual FoxPro experience, and a laptop

Xbase++ Roadmap: What's Next!

**Presenter:** Steffen F. Pirsig  
**Level:** All levels  
**When:** Saturday, September 24, 5:15 - 6:30, Arizona

In this session, we will talk about our vision for the years to come in terms of the features and technologies that we plan to incorporate into future Xbase++ updates/releases. We will have a look at industry trends and developments which may affect your business model or create new opportunities. Of course, you will also learn
where Alaska Software thinks Xbase++ needs to be improved or might have deficiencies. In short, if you are an Xbase++ developer or if you are considering moving to Xbase++ from another language, this session is your "moment of orientation" for the next 12 months and beyond.

You will learn:

- About the future of Xbase++
- What didn't go so well in the past
- How to prepare for the future

Prerequisites: None

You Mean I Have to Write About it, Too?

Presenter: Tamar E. Granor
Level: All levels
When: Friday, September 23, 11:30 - 12:45, Elliott (R1)
Saturday, September 24, 11:30 - 12:45, Elliott (R2)

Many software developers would prefer never to have to write in a natural language; they're much happier with programming languages. But the ability to communicate in writing is actually an essential skill for successful software development. Developers need to be able to write specifications and developer documentation, as well as to clearly ask questions of their customers and to answer customer questions. In some cases, developers are responsible for end-user documentation, too.

In this session, we'll see how to produce documents that say what you need to say in an accessible way, whether you're writing a user manual or an email. We'll look at all stages of the writing process, from organization to writing to editing to proofing. This session will be run as a workshop. Come prepared to write and edit. Please bring something on which to write and something to write with.

You will learn:

- How to approach writing tasks
- How to organize a document
- How to write clearly and concisely
- That all documents require editing

Prerequisites: None
“Where in the World is...”: Geo-Coding and Mapping (for Free!)

Presenter: Andreas Gehrs-Pahl
Level: All levels
When: Saturday, September 24, 8:30 - 9:45, Bisbee (R1)
       Sunday, September 25, 10:00 - 11:15, Bisbee (R2)

This session will show how to geo-verify and geo-code an address and how to display an address or location on a map in your application. To accomplish this, the free Google Geo-Coding API and Mapping features are used. An application will be created that will geo-verify and geo-code addresses and display them on a Google Map. In addition the data that was accumulated by the GPS tracker Service application from the "You have been Served" session will be displayed, to show where the tracked vehicles are and where they have been.

Even though the demo program will be written in Xbase++, the generic information about the Google API and Google Maps might also be useful to VFP developers.

You will learn:

- The difference between location and address
- The different formats and parts of addresses and locations
- Why an address should be geo-verified and geo-coded
- How to use the Google Geo-Coding API to verify an address and get GPS coordinates
- How to display addresses and locations in your application using Google Maps

Prerequisites: Familiarity with the Xbase++ language. Some knowledge of HTML, XML, and Active-X components is a plus.

“You have been Served”: Service (and Controller) Applications

Presenter: Andreas Gehrs-Pahl
Level: Beginner, Intermediate
When: Friday, September 23, 10:00 - 11:15, Bisbee (R1)
       Saturday, September 24, 2:00 - 3:15, Bisbee (R2)

In this session, you will learn how to create a simple Service application. The example program will be a vehicle tracking application that receives the location (and possibly other details) of a fleet of (imaginary) delivery trucks and records the received data in a PostgreSQL (PGSQL) database. In addition, a Service Controller application will be created to manage (install, start, pause, stop, and uninstall) the Services (the Vehicle Tracking Service as well as the PGSQL Database Server). This Controller application will also act as a dashboard for the Tracking Service and to manage the database on the backend. The Service will be listening for WebSocket connections and will save the received data (consisting of an ID, GPS coordinates, a Date/Time Stamp, etc.) in a PGSQL database. It will also respond to status requests from the Controller application.

You will learn:

- What a Service application is and for what it could be used
- What a Service Controller application is and why you might not even need one
- How to create and install a Service application
• How to control and debug your Service application
• How you can use WebSockets to communicate with the IoT

Prerequisites: Familiarity with the Xbase++ language
Speakers

Rick Borup

Rick Borup is owner and president of Information Technology Associates, a professional software development, computer services, and information systems consulting firm he founded in 1993. Rick earned BS and MBA degrees from the University of Illinois and spent several years developing software applications for mainframe computers before turning to PC database development tools in the late 1980s. He began working with FoxPro in 1991 and has worked full time in FoxPro and Visual FoxPro since 1993. He is a co-author of the books Deploying Visual FoxPro Solutions and Visual FoxPro Best Practices For The Next Ten Years. He has written articles for FoxTalk and FoxPro Advisor and is a frequent speaker at Visual FoxPro conferences and user groups. Rick is a Microsoft Certified Solution Developer (MCSD) and a Microsoft Certified Professional (MCP) in Visual FoxPro.

Roger Donnay

Roger Donnay is the owner of Donnay Software Designs, a Boise, Idaho firm specializing in programming and consulting in the Xbase++ language. Roger started using xBase languages in 1982 with dBASE II. His product, dCLIP, was voted "Best Clipper Add-on" by readers of Database Advisor magazine. Roger has 12 years of experience with Xbase++ and developed the product eXpress++, a library designed specifically for Clipper-developers to leverage their knowledge of xBase dialects in a way that eases the transition from text-based to GUI. Xbase++/eXpress++ applications are now in use by thousands of end-users in the USA and Europe. Roger has been speaking at Clipper and Xbase++ - Developer Conferences around the world since 1988.

Spyros Bobby Drakos

Spyros Bobby Drakos started programming on an IBM 360/370 Mainframe while in college during which time he took various jobs performing and playing in bands to aid tuition. After graduating with a B.S. in Management Information Systems and a B.S. in pre-medicine from Pace University, he bought an IBM PC while working in one of New York City’s first personal computer stores. Armed with the original IBM manuals he got his taste of how computers work by upgrading his system to an XT and started a small service in computer system repair. After a small stint teaching system design case studies at the University, he landed a job in the field of medical diagnostics followed by one working on projects for the US Department of Defense and consulting for Coopers and Lybrand. From there he went out on his own to design software for video rental, dental laboratory and building management companies. When not programming, he has served as head speech writer for various cultural affairs events and performed solo in clubs and cruise ships and with his band in several parts of the country.

Today he owns Business Development Micro Systems and consults for the taxi limousine industry of New York City. He currently maintains software for law firms, insurance companies, taxi meter shops, medallion leasing companies, and dispatch garages, as well as transportation companies in Puerto Rico.

These days he divides his interests by serving as musical director or production manager for local stage productions. He is also an emcee for various community events and conferences, works as a
vocal coach, writes mini-musicals and monologues for auditions, and teaches improv and Broadway stage classes.

**Alec Gagne**

Alec Gagne is a 15-year veteran former police officer from northern California. In the 80's he became involved in various aspects of technology as they relate to the field of law enforcement. In 1987 he created one of the first laptop-based law enforcement mobile data systems in the U.S. He began working with FoxPro 2.0 in 1991 as a co-developer on a public safety dispatch communications project. He served as a technical adviser to the California Department of Justice and received a commendation from the State Attorney General for his work on a first of its kind state-wide digital mugshot system (CAL-Photo) that later became one of the models used for the FBI National Criminal Information Center technology update (NCIC-2000) project. In 1995, he transitioned into the private sector working in marketing for a Fortune 100 technology company and as a consultant subcontractor for Arthur Andersen/Accenture. Leveraging his unique blend of law enforcement and technology experience, in 1997 he created his own business as a provider of application software for the justice and public safety market. Today, Mr. Gagne’s company and its VFP 9 based suite of software products currently serve a wide range of federal, state, county, and local law enforcement customers throughout the United States.

**Andreas Gehrs-Pahl**

Andreas is the owner of Absolute Software, LLC, a small software development company located in mid-Michigan. He has worked with various database applications, including dBase, ADAD9, FoxBase, FoxPro, Clipper, Alpha5, Clarion, xHarbour, and, starting in 1998, predominantly Xbase++. Using Xbase++, he has done many data conversions to and from various data sources and formats, and in the process worked with numerous RDBMSs, including SQL Server, DB2, Oracle, and PostgreSQL.

Since 1995, he has developed and supported a suite of Clipper/Xbase++ records management software products that have been used by more than 180 law enforcement agencies across Michigan. Andreas also is a frequent contributor to the Alaska and Xb2Net news groups. Additionally, he maintains the open-source XbZLib add-on library that allows Xbase++ developers to manipulate Zip files.

Andreas enjoys drumming and is an AeroSpace History buff. He knows (virtually) all there is to know about aviation and aircraft—just ask him.

**Tamar E. Granor**

Tamar E. Granor, Ph.D., is the owner of Tomorrow’s Solutions, LLC. She has developed and enhanced numerous Visual FoxPro applications for businesses and other organizations.

Tamar is author or co-author of more than a dozen books including the award winning *Hacker's Guide to Visual FoxPro* and *Microsoft Office Automation with Visual FoxPro*. Her most recent books are *VFPX: Open Source Treasure for the VFP Developer* and *Making Sense of Sedna and SP2*.

Tamar served as Editor of *FoxPro Advisor* magazine from 1994 to 2000 and was Technical Editor from 2000 to 2008. She served as co-author of the popular Advisor Answers column from 1993 to 2008.
She has also written for FoxTalk and CoDe; she currently writes for FoxRockX.

Tamar is one of the organizers of the annual Southwest Fox conference and founder of the Philadelphia Visual FoxPro User Group. In 2007, she received the Visual FoxPro Community Lifetime Achievement Award. She received Microsoft Support’s Most Valuable Professional award annually from the program’s inception in 1993 through 2010. Tamar speaks frequently about Visual FoxPro at conferences and user groups in North America and Europe.

You can reach her at tamar@tamargranor.com or through www.tomorrowssolutionsllc.com.

Doug Hennig

Doug Hennig is a partner with Stonefield Software Inc. He is the author of the award-winning Stonefield Database Toolkit (SDT); the award-winning Stonefield Query; the MemberData Editor, Anchor Editor, and CursorAdapter and DataEnvironment builders that come with Microsoft Visual FoxPro; and the My namespace and updated Upsizing Wizard in Sedna.

Doug is co-author of VFPX: Open Source Treasure for the VFP Developer, Making Sense of Sedna and SP2, Visual FoxPro Best Practices For The Next Ten Years, the What’s New in Visual FoxPro series, and The Hacker’s Guide to Visual FoxPro 7.0. He was the technical editor of The Hacker’s Guide to Visual FoxPro 6.0 and The Fundamentals. All of these books are from Hentzenwerke Publishing. Doug wrote over 100 articles in 10 years for FoxTalk and has written numerous articles in FoxPro Advisor, Advisor Guide to Visual FoxPro, and CoDe. He currently writes for FoxRockX.

Doug spoke at every Microsoft FoxPro Developers Conference (DevCon) starting in 1997 and at user groups and developer conferences all over the world. He is one of the organizers of the annual Southwest Fox and Southwest Xbase++ conferences. He is one of the administrators for the VFPX VFP community extensions Web site. He was a Microsoft Most Valuable Professional (MVP) from 1996 through 2011. Doug was awarded the 2006 FoxPro Community Lifetime Achievement Award.

Andreas Herdt

Andreas Herdt was born in 1970 and graduated from his academic high school in 1990. His first contact with computer hardware was a Commodore C64 at the age of 15. However, the first contact with software was on an Apple IIe in a training course of information science. A turtle was to be moved in an area strewn with obstacles.

After he completed his academic high school diploma, Andreas started as a trainee for Air Traffic Control in Frankfurt, Germany. In 1995 he accommodated his passion for hardware and software. He studied Computer Science from the Information Science Polytechnic at Darmstadt where he focused on color electronic page setting and simulation technology. He graduated in 2000 with a Master's degree. His thesis was about quality assurance for GUI applications. An internship brought him to Alaska Software where he got in touch with the Web Application Adaptor (WAA). Since then he constantly developed his appetite for more, leading finally him to work for Alaska Software.

Today Andreas benefits from the experiences and passion—among other areas—in improving the Xbase++ Runtime environment. He is involved in research on multi-core scalability and transactional memory.
Venelina E. Jordanova

Venelina got her first touch with computers and programming during her school time at the Mathematical High-School. Having a whole year of specializing in computer programming and an internship in the regional branch of the Bulgarian National Bank was an exciting experience and since then Venelina believes being a programmer is the greatest job. During her Computer Sciences study at Varna Technical University, Venelina received a scholarship from a Bulgarian military company, giving her a chance to work for them in the summer programming in Assembler and C. After her graduation Venelina was invited to be part of the information system development team in the Employment Agency in Varna. Trying to decide between Pascal and C++, the team suddenly received a recommendation to use FoxPro. Now Venelina says, “I fell in love with this language which still continues today”.

In the following years her career was tied again to the Varna Technical University as a teacher. Since 1997 she devoted her efforts and knowledge to her own company JEI. In 1999 Venelina became an MCP and in 2001 her company became a Microsoft Certified Partner. In the list of projects she has worked on are wide ranges of various applications like banking, insurance and financial operations, petrol station POS software, postal address validation, an ERP system for the Bulgarian market, billing systems for utility companies, a report generating tool, and many other tools for VFP. From 2003 to 2014, Venelina was the team leader for the Visual Extend framework development.

Along with VFP projects, Venelina is also an architect and project leader for many .NET desktop, web, and mobile projects. Since 2003 Venelina has been a regular speaker at the Visual FoxPro DevCon in Frankfurt, as well as at numerous regional events in Bulgaria, conferences in Bucharest, Bunnik, and Paris, and the VFP DevCon in Prague. Since 2008, Venelina has worked together with Uwe Habermann as manager of V&U Ltd. and in addition to the development of Visual Extend, their focus was the development of various Visual FoxPro applications as well as the rich capabilities of Silverlight and the newest Microsoft technologies. This development turned later into new Modern UI and Windows Store applications RAD—Alvenos as the next step for the developers to go on. Nowadays, Venelina and V&U team work on various information systems development, using all of the development tools that Microsoft provides and are always researching the newest technologies, approaches, and tools.

Chris McGuinness

Chris McGuinness has always been interested in how things fit together. This interest has led him into a career where he occasionally writes code but predominantly designs system architectures, workflows, and user interfaces. These architectural designs have found their way into everything from wafer handling systems for the semiconductor industry to lifesaving biometrics and intervention care communications for the battlefield.

The emergence of APIs and Infrastructure-as-a-Service has created a wonderful new set of Legos to be snapped together in fascinating fashion.

Chris has had the great fortune to spend the last decade-and-a-half working with Black Mountain Software where he has served as the Director of Engineering for the last several years.
Jody L. Meyer

Jody Meyer has been a software developer for 30 years and has been using Fox for all but three of them. Currently, Jody works for White Light Computing (WLC). At WLC, she works with all kinds of customers on various SQL Server/VFP applications. Previously, she was the chief architect of the WinMAGI framework, which is a world-class manufacturing ERP system for small to mid-sized manufacturers.

After hours, Jody takes her passion for software development and applies it to some volunteer projects and a couple of user groups. She is the President and Webmaster of the Grand Rapids Area FoxPro User Group (GRAFUG). She is a member of the Detroit Area Fox User Group (DAFUG), Great Lansing Area for SQL Server (GLASS), and has been known to make the trek to the Chicago FoxPro Users and Developers Group (ChicagoFUDG). She has attended a number of SQL Saturday conferences as well. When she isn't a taxi driver for her son David to Karate and Royal Ranger events, Jody loves learning karate, being a Sunday School teacher, and bicycling with her husband Jeff and walking with her dogs, Beau and Behr. You can contact Jody at:

Email: JLMeyer@WhiteLightComputing.com

Steffen F. Pirsig

Steffen F. Pirsig has been Chief Architect of Xbase++ since its original prototype in October 1994. He also is a co-founder of Alaska Software and President of Alaska Software, Inc.

As a frequent speaker at various developer conferences as well as at universities, Steffen manages to combine his passion for database management systems, distributed computing and of course Xbase++, with his love for engaging in shop talk and in-depth discussions while presenting his ideas and visions to an interested audience.

Steffen enjoys good wines, hiking, bicycling and music of independent labels. He also likes to fly rc-planes in his spare time.

Rick Schummer

Rick Schummer is the president and lead geek at White Light Computing, Inc., headquartered in southeast Michigan, USA where the team guides the customer’s Information Technology investment toward success. He enjoys working with top-notch developers, thrives on the mode of continuous learning, has a passion for developing software using best practices, strives to surpass customer expectations, and shares his knowledge with others whenever he can. After hours you might find him creating developer tools that improve developer productivity, or writing articles for his favorite technology journals and his blog.

Rick is a co-author of VFPX: Open Source Treasure for the VFP Developer, Making Sense of Sedna and SP2, Visual FoxPro Best Practices for the Next Ten Years, What’s New In Nine: Visual FoxPro’s Latest Hits, Deploying Visual FoxPro Solutions, MegaFox: 1002 Things You Wanted To Know About Extending Visual FoxPro, and 1001 Things You Always Wanted to Know About Visual FoxPro. He is a regular presenter at user groups across North America and is a founding member and Secretary of the Detroit Area Fox User Group (DAFUG). Rick is the lead organizer of the Southwest Fox Conference,
and is a regular presenter at other conferences in North America, Europe, and Australia. He is an administrator of VFPX, and a Microsoft Visual FoxPro MVP from 2002 to 2011. Rick was awarded the FoxPro Lifetime Achievement Award in October 2010.

You can contact Rick via email at raschummer@whitelightcomputing.com

Eric J. Selje

Eric Selje is a software developer in Madison, WI. He has been programming in Fox since FoxBase 1.21 in 1986 and recalls eagerly waiting for the box from UPS with "FoxPro". In 1995 he founded MadFox, the Madison FoxPro User Group, after attending DevCon in San Diego and realizing that learning Visual FoxPro 3 would take a group effort.

Eric is professionally known as Salty Dog Solutions, LLC, developing business applications for the desktop, web, and most recently mobile devices with an emphasis on database-driven applications. He is also co-author of VFPX: Open Source Treasure for the VFP Developer.

When he's not planted in front of a screen, Eric can most often be found on the Ultimate field, the baseball diamond, solving crosswords, or with his face in a book.

Rick Strahl

Rick Strahl is the Big Kahuna at West Wind Technologies on Maui, Hawaii. The company specializes in Web and distributed application development, training and tools with focus on ASP.NET, .NET, and Visual FoxPro. Among the tools created and sold by Rick's company are West Wind Web Connection, West Wind Internet Client Tools, West Wind WebSurge, West Wind Html Help Builder and Web Monitor. Rick has been working with Microsoft technology close to 25 years, is an ASP.NET MVP and Insider, a frequent contributor to magazines and books, and speaks frequently at professional developer conferences all over the world. For more information please contact Rick at rstrahl@westwind.com.

Tuvia Vinitsky

Tuvia Vinitsky is a principal in Vinitsky Consulting. Vinitsky Consulting develops and markets major vertical applications for non-profit organizations, community centers (JCC, YMCA), and delivery management. They also provide custom database software and website development.

Tuvia's Fox experience dates back to the days of FoxBase and CompuServe. He has written for FoxTalk and has been a presenter numerous times at regional user groups. Tuvia has always enjoyed expanding the capabilities of FoxPro, whether it was graphic printer drivers in the days of DOS or Web enabling the latest VFP 9 features.

Tuvia believes in having both breadth and depth of experience and has served as project leader for many large projects, including projects at companies like Avis-Rent-a-Car, Chicago Board of Trade, Marmon Group, and Lotus.

Tuvia and his family are long time Chicago residents. He attended Northwestern University and is an ordained Rabbi. His years at Northwestern, with its reputation for the performing arts, must have left
Not only is he known for his popular presentations on software development, but he frequently is a guest speaker on Jewish philosophy and teachings.

**Till Warweg**

Till graduated with a Master’s degree in Computer Science from the Information Science Polytechnic in Frankfurt/Main.

In 1997, Till joined Alaska Software straight from college. His primary project was the development of Xbase++ for the Windows platform. Soon thereafter, he assumed responsibilities for maintaining and enhancing Xbase++’s user interface functionalities. His special interests, and maybe therefore his strong suit, are the Graphics Engine and the component library built into Xbase++ (Xbase Parts). Till is also involved in various other areas of product development at Alaska Software. For example, he is a key member of the “PolarFox” project team.

Till is a frequent speaker at various developer conferences and other events surrounding Xbase++, both in Europe and in the US. Apart from his interest in computing, Till enjoys riding his motorcycle, exercising, and reading a good book.

**Christof Wollenhaupt**

Christof Wollenhaupt, head of Foxpert, offers FoxPro and .NET development and consulting services to customers who benefit from his nearly 25 years of experience. Christof is a regular speaker at conferences and user groups around the world, organizes the Hamburger Stammtisch für Microsoft Datenbankentwickler (Hamburg user group for Microsoft database developers), has written for various magazines including a regular column in FoxPro Advisor for more than 10 years, and was a Visual FoxPro MVP from 1997 to 2010.
We greatly value the sponsors of Southwest Fox, who help cover conference costs and help out in many other ways. There are five levels of sponsorship: Platinum, Gold, Silver, Bronze, and Consultant.

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The mission of White Light Computing is to guide Information Technology investments toward success!

We work with businesses of all sizes to develop custom software solutions, integrate with other software systems, convert data from one system to another, create applications that serve vertical markets, and write add-on tools for analysis and reporting for existing software. We assist independent developers and consulting firms with database design, project management, programming, code reviews, testing, deployment, training, and one-on-one mentoring. White Light Computing also sells the popular HackCX Professional and the award-winning ViewEditor Professional, and offers a complete suite of free developer tools to help increase developer productivity. You can get more details at [http://whitelightcomputing.com](http://whitelightcomputing.com).

Stonefield Query, from Stonefield Software Inc., is a user-friendly data mining, business intelligence, query, and report writing tool. With its intuitive wizard driven design, Stonefield Query makes report writing a snap for even the most novice user. Elegant and persuasive reports can be created in minutes with little or no technical knowledge required. [http://www.stonefieldquery.com](http://www.stonefieldquery.com)

Tomorrow’s Solutions, LLC is owned and operated by Tamar E. Granor, Ph.D., a consultant and application developer specializing in database applications. Since 1988, Tamar has been working primarily with Visual FoxPro and its predecessors, FoxPro and FoxBase+. She has worked with both large and small businesses as well as non-profit organizations. Currently, the primary focus of Tomorrow’s Solutions is working with and for other developers through sub-contracting and mentoring. [http://www.tomorrowssolutionsllc.com](http://www.tomorrowssolutionsllc.com)

Founded in 1997 with HQ in Grand Junction, CO, New York City, NY, and in the metropolitan area of Frankfurt/Main, Germany, Alaska Software solely concentrates upon the development and improvement of Xbase++ as a technology platform. Xbase++ is a 100% Clipper compatible xbase language enriched and improved by language features, such as object-orientation and data persistence.
Alaska Software pioneered in the implementation and hands-on usage of intelligent multi-threading technology in Xbase++, especially for Line-of-Business and mission critical applications. Crucial to the corporate philosophy is the perpetuation of continuous innovation and technological headway while aiming to provide best possible continuity and protection of hitherto undertaken investments. More than one million application end-users as well as thousands of former Clipper-, dBase- and FoxPro developers rely upon Xbase++ for several years, thus having built their business success upon Xbase++. [http://www.alaska-software.com/](http://www.alaska-software.com/)

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**Foxpert**

Foxpert software development and consulting offers its services to single developers and Fortune 100 companies alike. Whether it’s Visual FoxPro, .NET, whether it’s architecture, design, security, or just getting the project done, whether it’s short term or long term, we can assist you with your software development business. For more information please visit [http://www.foxpert.com](http://www.foxpert.com).

**Forward Thinking Software**

Forward Thinking Software introduces CleverFox Backup as a service that backs up your customer’s Visual FoxPro and SQL Server data to the cloud. CleverFox Backup is an additional layer of protection when you find out your customer’s local backups were skipped or are failing, or not even set up. CleverFox Backup helps you be the hero when your customer calls you to support tables that are completely encrypted by Cryptolocker, trashed by a power outage, or deleted by an angry employee. We look forward to showing you to our exciting product you can privately brand and deploy to your customers. [https://cleverfoxbackup.com/](https://cleverfoxbackup.com/)

**Conference Geeks**

Introducing Conference Geeks!

After 15 years of supporting conferences as part of Geeks and Gurus, we've grown to the point where we just had to break out on our own.

Although our conference customers often call us the "A/V guys" we're much more than that. We've built a successful business supporting conferences because of our excellent understanding of IT and how it can impact conferences and meetings in terms of both technology and software. Conference Geeks has grown as a result of our excellent customer service and professional approach to all aspects of our conference services.

If you need projectors, laptops, large screen displays, printers or anything else for your conference, please check us out at our new home on the web: [http://conferencegeeks.com](http://conferencegeeks.com).
West Wind Technologies provides productive developer tools as well as custom consulting and support operations to customers. West Wind is well-known for producing widely used tools like the West Wind Web Connection Web development framework for Visual FoxPro, West Wind HTML Help Builder online and offline documentation creation tool, and developer tool libraries like West Wind Web Service Proxy Generator, West Wind Client, West Wind WebSurge, and Web Monitor tools. We also provide consulting, mentoring and support services for a variety of technologies including Visual FoxPro, .NET, and general front-end and backend Web Development technologies. [http://west-wind.com](http://west-wind.com)

Axialis Software develops software solutions for professional graphic designers and developers. Products include IconWorkshop, Professional Screensaver Producer, CursorWorkshop and several others. [http://www.axialis.com](http://www.axialis.com).

Servoy is the Next Generation development and deployment platform for FoxPro ISVs, corporate organizations and developers who are looking to develop Cloud, mobile, or on-premise software applications.

After Microsoft discontinued VFP and ended support, many businesses adopted Servoy to successfully enhance or migrate their VFP applications. The primary reasons for this are that Servoy has many similarities to VFP, it is easy to learn for FoxPro developers, and it is considered by many as the product into which VFP should have evolved. Servoy has been evolving as a powerful cross-platform development tool over the past 10 years and it offers training, consulting, and project management to assist customers with projects, and there is an excellent expanding Servoy community similar to that of FoxPro in the 90’s.

Visit [http://www.servoy.com/foxpro](http://www.servoy.com/foxpro) for more info.

We are committed to providing the best dedicated magazine for FoxPro Developers worldwide. Our list of authors includes many names already familiar to you. Great articles from great developers will help you hone your skills and increase your productivity. Join FoxRockX today at our affordable rates! [http://www.foxrockx.com](http://www.foxrockx.com)

Visual Extend is the framework for Visual FoxPro which has made the largest leaps forward in the last several years due to massive investments in new features and tools. The concept of rapid application development has been extended to Client/Server applications with complete support for CursorAdaptor. Our framework includes source code for all programs and class libraries.
as well as various sample applications. The newest build and a free trial is always available for download. An English newsgroup is offered.  

http://www.visualextend.com/

DBi Technologies Inc. is a commercial software development company focused on empowering application developers with the most flexible and respected, reusable commercial software components for Scheduling and Presentation layer application design. DBi is recognized for its award winning component products and its technical support for customers working in any Microsoft or .NET and OLE compliant development environment.  


Atlas is a complete, paperless office solution designed for chiropractic offices. It handles billing, scheduling, treatment and care tracking, patient education and retention, clinic reporting, soap notes and much more. With a variety of innovative features including our new mobile platform flex, Atlas will not only help you save time but help grow any Chiropractic clinic. Atlas is customizable and the go-to solution for small to large volume clinics with every type of practice style and philosophy.

Atlas is built using Visual Foxpro 9.0 and we are proud to continue to support Southwest Fox 2016. Without the support of the VFP community our company would not be as successful and able to continue to grow to include clients now in over 25 countries.  


The Foxfire! Report Writer v8+ product line is a family of data mining tools designed for regular business users. Developers can adapt it to almost any database and add any needed features on demand, in order to fit user needs like a glove. It is the only set of report writers for the VFP environment that can operate interchangeably on both platforms. Its new interactive drag-'n-drop design tool (released May 2007) has been praised by users and usability experts alike for simplicity without sacrificing power. Micromega Systems, its developer/publisher offers Foxfire! consulting, integration, and training services. Our growth strategy is partnering, and we are currently seeking other developers who want to partner to create custom or localized versions to address special market opportunities. Go to www.foxfirereporting.com to explore how we might work together.

DevExpress engineers feature-complete Presentation Controls, enterprise-ready Reporting Systems, IDE Productivity Tools and Business Application Frameworks for Visual Studio. Our technologies help you build your best, see complex software with
greater clarity, increase your productivity and create stunning touch-enabled applications for Windows, Web and Mobile, without limits or compromise.

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**Silver Sponsors**

Steema Software is a privately held company founded in 1996 and has been providing software tools for application developers ever since. Steema authors, distributes and supports all its products. Steema’s flagship product, the TeeChart Charting Library, is widely acknowledged as an industry standard. http://www.steema.com

LogicNP Software specializes in the development of developer-centric software products such as reusable controls, components and libraries for .Net, WPF, ActiveX and MFC/ATL developers. Our mission is to provide innovative, developer-friendly, robust and easy-to-use software that helps developers build the best applications that today’s competitive marketplace demands. Our products are used by thousands of large corporations, multi-national companies, consultants, ISVs and professionals from all over the world working in finance, government, military, education, technology, health, insurance, consulting and more. http://www.ssware.com


EQEUS.COM is the developer of XFRX, the comprehensive Visual FoxPro report engine extension. XFRX can export report output to multiple formats, including PDF, MS Office, OpenOffice, and images, as well as preview and print. It can be easily plugged into existing applications, using standard Visual FoxPro reports. XFRX works with Visual FoxPro versions from 5.0 to 9.0.

The new web-based extension allows exporting reports to a cloud-based report viewer and repository.

EQEUS.COM also provides consulting services in web based applications, .NET and SQL Server, www.equeus.com.
Information Technology Associates (ITA) is a professional software development, computer services, and information systems consulting firm specializing in the design, development and support of custom software for business and office applications. Services offered include • Custom Software Design and Development • Website Layout, Design, and Development • Data Processing Services • Consulting and Technical Support Services • Project Mentoring. In business since 1993, ITA has earned a reputation for quality and reliability. Our business is to help your business succeed! Learn more at www.ita-software.com.

ESET is a global leader in antivirus and Internet security software with over 25 years of proven experience. Powered by ESET NOD32® technology, which has won an unmatched 80 VB100 awards for malware detection, ESET business solutions offer proactive, fast, and effective server-to-endpoint protection for Windows, Mac and Linux environments. Proven. Trusted. http://www.eset.com.

123 EDI is a company founded in 1992. We specialize in electronic data interchange (EDI) for the retail, transportation, automotive and health-related industries. In addition to comprehensive software and Web based EDI solutions, 123 EDI provides a wide array of services, including consulting, EDI integration, testing and certification. Our leading solution, EDI Engine, is a software application oriented toward end-users and extended functionality. All our solutions have the trademark of excellence, make a great case for return on investment, and are cost-effective, easy-to-use, robust and flexible. http://www.123edi.com/.

AKSEL, headed by Andrew MacNeill, is a consulting company that provides development, technical writing, media development (podcasting/screencasting), data analysis and project management services around the world. From short-term writing and analysis projects to long-term development and product management projects to community-driven projects, AKSEL offers personalized solutions to businesses and individuals, creating an ongoing working relationship. For more information, visit www.aksel.com.
Advance Data Systems has been developing effective business applications since 1986. These systems include everything from inventory control, cost accounting, payroll, legal document management, business-to-government X12 EDI, and many more up to our most recent, very comprehensive, 1-page web app using our own JavaScript libraries (with an assist from JQuery and Web Connection).

User Groups

Joining a user group is a great way to meet other FoxPro developers, learn more about your favorite tool, find out about other tools and techniques, and maybe even develop your own speaking skills. The following information was provided by the individual user groups as a service to Southwest Fox attendees.

Chicago FoxPro Users and Developers Group

Chicago FoxPro Users & Developers Group

http://chicagofudg.com

Contact: Randy Bosma (mannagersystems@gmail.com)

The Chicago FoxPro Users & Developers Group has a history of over 20 years of providing a focus for promotion of our members. We see to our own continuing education, our professional best interests, and our fellowship. We meet every 2nd Tuesday without fail. The only cancelled meetings in the past decade have been waist-high snowfalls and September 11, 2001. We currently have a regular core of about 15. In addition there are a few dozen less frequently participating programmers. Because of the central location of Chicago in the Midwest and the nation, we are able to feature speakers who happen to be here on business or for pleasure. These drop-ins combined with trainers and promoters who are in travelling distance combined with our own knowledgeable members make for a very interesting syllabus of monthly meetings. Our events are supplemented with pizza, tall tales, puzzles, questions, and good humor. Visit chicagofudg.com or drop in.

Detroit Area Fox User Group

Detroit Area Fox User Group

dafug.org

President: Dale Zimmer (DZimmer@ipsdev.com)

Secretary/Treasurer: Rick Schummer (RASchummer@whitelightcomputing.com)

DAFUG meets on the second or third Thursday of every second month to discuss FoxPro and developer related topics. The group was formed back in 1994 with the goal of sharing knowledge, inspiring ideas, and teaching each other about FoxPro and Visual FoxPro (VFP). Although all subjects are open to members’ discretion, DAFUG strives to schedule noteworthy speakers to present subjects in their area of expertise. It is not uncommon to find speakers rehearsing conference sessions at our meetings. DAFUG meetings serve as ideal networking
opportunities for FoxPro and Visual FoxPro (VFP) software development professionals and amateurs alike. Problem solving, exploratory discussions, job opportunities and more. You can find future meeting dates, planned topics, directions to our meeting location, and email contacts for the leaders on our Web site.

Grand Rapids Area FoxPro User Group

www.grafug.com

President: Jody Meyer (info@grafug.com)

GRAFUG consists of FoxPro software developers who want to network with each other to share information, knowledge, ideas, discoveries, tips, tricks and war stories. We welcome all levels of users and developers from beginner to expert. Our members develop in the various different versions of FoxPro from older DOS and Windows versions to the newer Visual FoxPro versions. Everyone’s welcome! You don’t have to be a member to come to a meeting. So please join us at our next meeting and we’ll make sure you feel right at home.

Madison FoxPro Users Group

www.MadFox.info

Contact: Eric Selje (info@MadFox.info)

MadFox is the FoxPro Users Group for southern Wisconsin, based in Madison. Since 1995, we’ve met on the 3rd Tuesday of the month for discussions about all sorts of topics, many of which are actually related to programming. All are welcome to join. Come to our website for more information.

Philadelphia VFP User Group

vfpphilly.blogspot.com

Contact: Tamar Granor (tamar@tamargranor.com) or James Connolly (JConnolly@jtca.com)

The Philadelphia VFP User Group, formed in 2005, meets monthly on the second Tuesday in Fort Washington, PA. Our meetings feature a mix of internationally known VFP experts and our own members, sharing their VFP knowledge. The meeting fee is $5 and anyone is welcome. Full meeting information (including meeting location) is available at vfpphilly.blogspot.com. To join our email list, sent an email to tamar@tamargranor.com. If you’d like to speak to the group, contact JConnolly@jtca.com.
Online Communities

Online communities are a great way to get answers to your development questions, chat about the latest current events, and get to know other developers from around the world.

**VFP**


**Foxite**


**MSDN Forums**


**ProFox**

- [http://leafe.com/lists](http://leafe.com/lists)

**Tek-Tips**


**Universal Thread**

- [http://universalthread.com/](http://universalthread.com/)

**VFPX**

- [http://vfpx.codeplex.com](http://vfpx.codeplex.com)

**Visual FoxPro Wiki**

- [http://fox.wikis.com/](http://fox.wikis.com/)
Xbase++
Alaska Newsgroups
http://news.alaska-software.com

Donnay Software Bulletin Board
Many developers have blogs where they post cool ideas, solutions to problems, and code. Some blogs are listed here, but please see the BlogWatch page on the Visual FoxPro FoxWiki (http://fox.wikis.com) for a complete listing.

Anderson, Bill  http://socaltomatoes.blogspot.com
Borup, Rick  http://rickborup.blogspot.com
Hennig, Doug  http://doughennig.blogspot.com
Landrum, Todd  http://blog.paladinpgm.com
Mrozowski, Paul  http://www.rcs-solutions.com/blog
Olson, Matthew  https://www.goodreads.com/author/show/8536602.Matthew_J_Olson/blog
Perez, Frank  http://pfosolutions-mi.com/blog
Schummer, Rick  http://rickschummer.com/blog2
Selje, Eric  http://saltydogllc.com/
Sherwood, Phil  http://www.philsherwood.com
Wollenhaupt, Christof  http://www.foxpert.com/knowlbits.htm
Social Media

Twitter is a great way to stay in touch with friends, colleagues, people you’re interested in, etc. See the Who’s Coming page (http://www.swfox.net/whoscoming.aspx) for the IDs of some of the people attending the conferences. In addition, be sure to follow the Southwest Conference, Twitter IDs SWFox and SWXbase. Search for hash tags #SWFox and #SWXbase.

The table below includes the Twitter, Facebook, and LinkedIn names of this and previous years’ attendees. For Twitter, the value in the Twitter column is their Twitter name. For Facebook, use “http://www.facebook.com/” followed by the value in the Facebook column. For LinkedIn, use “http://www.linkedin.com/” followed by the value in the LinkedIn column.

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How can White Light Computing help you?

White Light Computing specializes in extending development capabilities, expanding resources on projects, and helping you to come up to speed on technology you need to implement today. We offer tools, one-on-one mentoring, solid and successful project management, strong testing skills, quick debugging, and guide application deployment to production environments. White Light Computing brings professional experience and expertise to your team.

✓ Developer Tools and Resources
   We have two successful commercial products called HackCX Professional and ViewEditor Professional. HackCX Professional is a safer and better editor than the BROWSE window when hacking your forms and Visual class libraries. ViewEditor Professional is a replacement for the VFP View Designer providing support for local views, remote views, remote data stored procedures, and provides the ability to script complex views to a program. Our VFP Programming Standards and Guidelines document, a set of free developer tools, and our commercial line are in use by companies around the world.

✓ Mentoring and Training
   We can provide classroom style training for several of your employees, or perform one-on-one problem solving. Our geeks can help you and your team learn about the various aspects of computing and software development, and different aspects of Visual FoxPro. Our lead geek, Rick Schummer has trained and mentored developers for more than 15 years In programming FoxPro and Visual FoxPro. He has trained end-users for more than 25 years in everything from working with the operating system, backups, using Microsoft Office and other productivity programs. Some of the training is formal, and some is very informal. We can do customizing training for your needs.

✓ Data Conversions
   Our team of developers converts data to and from different data sources for custom and vertical market applications. Data conversion is often tedious work with a host of challenges that bog down your development staff when they need to be focusing on delivering the core application. Our data scrubbing techniques, attention to detail, and ability to move large volumes of data between systems have a proven track record of success with end-users who rely on this Information to run their business.

✓ Software Testing
   The key to successful acceptance of your application by your customers is making sure it meets the documented requirements. A well known problem in the computing industry: developers are not the best people to test the code they create. Small development shops often do not have the resources to test code with a second developer and IT department resources are often stretched doing the development. Our software testing techniques give proven results and lead to less defects reported after deployment.

✓ Software Deployment
   Today's Information Technology (IT) professionals are responsible for managing a multitude of different platforms, operating systems, hardware configurations, networks, application development tools, and third party components. Implementing and maintaining custom software and vertical market products you develop in this environment is more complex than ever, despite running in the most advanced environment since the dawn of the personal computing era. A strong understanding of deployment fundamentals can reduce the problems introduced into the process and increase the ability to react to unexpected situations and resolve inevitable problems.

✓ Stonefield Query Implementations
   Have you recently purchased the powerful Stonefield Query ad-hoc query and reporting tool? Need assistance in configuring it to work with your database so you can get this important tool into the hands of your customers? Leverage the years of experience our team has implementing this for other vertical market and custom software applications.

We specialize in FoxPro for DOS and FoxPro for Windows conversions too!
Need some help with something not on our list? We still may be able to help, please give us a call!

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Powerful Customization Functionality
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* Fully supports VS 2008, Vista and x64
* Easy To Deploy
* No runtime fees or royalties

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The Visual FoxPro language moves to its new <homeland/>

The PolarFox project, the next generation Visual FoxPro, comes with a new, revised application model and framework, which is able to support not only Windows, but also Web and Mobile application development.

The first milestone reached towards our vision of the next generation Visual FoxPro alias PolarFox. With the new PolarFox platform, any Visual FoxPro/FOXPro developer can use existing knowledge, existing code and existing databases to develop state-of-the-art web or connected mobile applications now! Why not add a Web front-end to your existing Visual FoxPro application using a development language you are already familiar with?

Benefits:
- Easy usage
- Fast (native code)
- Secure (compiled)
- IIS and Apache support
- Supports FastCGI like PHP
- No limits
- Complete and open
- Many build-in features
- Full ObjC++ language
- OOP, Functional, Procedural
- Talks JSON, XML, HTML
- Works with Jquery, Dojo...
- Based on Xbase++
- Free for commercial use

Start:
Mark the date: November 10th 2011, the launch date of the first community technology preview! From this day on, your skills, your source code and your knowledge have a new homeland!

Finally: <CXP> is free for commercial use! Start now making money with your existing Visual FoxPro skills and state-of-the-art <CXP:Technology/>

Top Questions
- What is PolarFox?
  PolarFox is the project name for the next generation of Visual FoxPro currently under development at Alaska Software
- What is <CXP>?
  CXP is an acronym for Compiled Xbase++ Pages. Think about PHP pages compiled to native code. Of course, the language is Xbase++ 2.0
- What is Xbase++ 2.0?
  Xbase++ 2.0 is the next major version of the Xbase++ language. In fact, Xbase++ 2.0 is Xbase++ 1.9 + SQL + WPF/Win8 extensions. It is a true object oriented, procedural, command and functional programming language
- How compatible is PolarFox?
  Existing VFP/FOX files are transpiled to Xbase++ 2.0 code. Existing SDD and MIF files are transformed to XFF (.xml markup). Your RX, LIX, DBF, DBL, CDK and FPT files are 100% supported
- Is it just a new Visual FoxPro?
  No, it is a complete reengineering of the Visual FoxPro development stack. No limits, no compromises
- Will there be runtime fees?
  No, PolarFox is a hybrid compiler, generating native code. Your resulting binaries are Windows 32/64bit conformant DLLs and EXEs which you can give away for free.
- Supported application types?
  With PolarFox you will be able to create native Windows Console, GUI (graphical user interface), Hybrid (text & GUI), Services and Web applications.
- I have so many questions!
  Talk with us or send email to polarfox@alaska-software.com
**What?**

*CleverFox Backup* is a service for backing up Visual FoxPro data to the cloud. It protects against common PC disasters such as disk failure, power surges, fire, and theft. It also safeguards against viruses and rootkits like CryptoLocker that target DBF files.

**How?**

*CleverFox Backup* is installed as a background service, no-user action required. Configuration (what to backup, how often and when) is done using a web-based management system. Backups are compressed and transmitted over a SSL connection to a secure data center where they are stored using AES-256 encryption.

**Why?**

*CleverFox Backup* is designed for Visual FoxPro systems. It has a feature set not found in competing services.

- Multiple backup sets (daily, weekly, monthly)
- Backup in-use DBF files
- Email notifications
- Web-based management
- API interface

---

**Cost?**

*CleverFox Backup* has multiple plans to fit almost any budget and need. Get started for as little as $9.95 per month.

- Simple monthly billing
- No long-term contract
- Cancel anytime
- FREE 30-day trial, no credit card

**Partner?**

Partnership opportunities are available for Vertical Market Application and Custom Application developers. *CleverFox Backup* handles all of the renewal, billing, and credit card processing. Partners get the benefits of:

- Reducing support costs related to corrupt DBF files or no recent backups
- Bundle with your application
- Revenue sharing

Partners have the ability to offer an Emergency Backup Plan to their customers (possibly for FREE) to perform weekly backups for a very low monthly cost. Contact us for more details.

*Saving your customer’s data to the cloud in case of a rainy day!*

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**Contact Us**

Forward Thinking Software, LLC  
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Washington, MI 48094  

(586) 960-5350  
info@forwardthinkingsoftware.com  
http://forwardthinkingsoftware.com
There Are So Many Report Writers
Why Choose Foxfire®?

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Foxfire’s new live design preview combines design and preview modes. It provides instant feedback and constant context, so end users really understand what they are doing.

New v8+ says it all!

Easiest To Use
Foxfire v8+ uniquely combines design and preview mode to give users an instant preview before they take a step and instant feedback afterwards without switching windows. A user can always see exactly what they’ll get when they click Run. Schemes and help files are simple, intuitive, clear and free of Greek-speak. So it’s easy to learn and use.

Customizable To Perfection
Redesign the UI any way you like. (If you have Foxfire! Web, you can create your own UI for it too.) Add or modify features to suit your needs. Foxfire’s open architecture has 32 hooks to add your own code and includes source for the report designer, you’ll be limited only by your imagination.

Windows And Web Interoperability*
Users can design reports in one environment and run in the other. Both UI’s share an object model, data dictionary and report library and can query from any ODBC compatible backend. The thin client ESP.NET web UP® (source included) acts a lot like the Windows UI to reduce report design time and effort. The web version includes the new Foxfire! Enterprise Request Server® to manage reports submitted from multiple client PCs.

Flexible Licensing and Joint Ventures
We believe you make more money by saying “yes.” Our regular licensing plans are very flexible, and we’re really creative in special cases. Tell us about yours. Together, we’ll co-create a plan that makes sense.

Joint ventures are our preferred way of developing new markets.

*Foxfire! Enterprise Web Server and the Foxfire! Web Designers are separately licensed products.

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For presales or technical questions, contact sales or sales@foxfirereporting.com.
For licensing questions, contact Chick Bornheim, cbornheim@micromegasystems.com.

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Calling All Software Vendors!
Join us for dinner at Gordon Biersch
Saturday, September 24, 7pm

In preparation for Southwest Fox, we’ve talked with many of you about modernizing your applications and some of the challenges smaller ISVs typically face. Given the feedback we have received, Servoy would like to invite you to dinner on Saturday, September 24 at Gordon Biersch, to discuss some of the overarching challenges and, more importantly, come up with joint solutions in order for you to be as successful in this challenging environment.

Servoy has hundreds of ISV’s on its platform, many of them well funded with larger software development teams in place. We can share with you their best practices and how it can be applicable to smaller ISVs. Below are some of the issues/challenges we will discuss:

- How do I migrate to the web or SaaS as a small company
- Is it possible to build a common core / modules / collaborate with other ISV’s
- How steep is the learning-curve, how many resources/time will it take
- Is there an automatic migration/conversion path

Stop by our booth and request your complimentary invitation to dinner at Gordon Biersch. We look forward to a fruitful meeting. For any questions, please contact:

Yvo Boom or Jan Aleman
yboom@servoy.com  jaleman@servoy.com
(805) 990-1865  (805) 405-7175