

WORKING ON PROJECTS REMOTELY

*Cathy Pendley, Vlamis Software Solutions, Inc.
cpendley@vlamis.com*

INTRODUCTION

As writing this, many thoughts came to mind. As a mother of five, I originally thought of how working remotely benefited me and my family. After spending eight years in the consulting industry, I decided that my family had suffered enough, and I left consulting and took a position as an IT director for a company in the Dallas area. I soon found that the number of commute hours and time away from my family wasn't what exactly what I expected. Therefore in 2004, I accepted a position with Vlamis Software Solutions, Inc. (VSS) as a Senior Consulting working remotely. It seemed like the perfect job for this mother of five. I could get back into consulting but not have to be on a plane every week.

Although, I could imagine all the benefits of working remotely would have for me, I didn't realize the benefits my new consulting company and our clients would receive. Not to say there haven't been struggles and technical issues to address along the way, but overall, I feel that working remotely has been a win situation for everyone involved.

BENEFITS

EMPLOYEE

Benefits for me as an employee and a consultant are very easy to discuss. My family has not only reaped financial benefits but non-financial as well.

Financially, we have saved in many areas including childcare, dry cleaning, vehicle expense, dining out, and house cleaning. Of course, "your savings may vary."

Childcare	\$10,000
Dry Cleaning	\$900
Vehicle Expense	\$3,000
Dining Out	\$600
House Cleaning	\$2,500
Total Savings	\$17,000

The amount of dollars saved is amazing, but I would give back 100% of the money for the work/life balance and the relief of stress that I have enjoyed since I have been working remotely. The amount of time saved from driving to and from work plus being able to be at home for unplanned events is amazing. I no longer deal with rush hour traffic and I can quickly handle emergencies at home without feeling like I am neglecting my work responsibilities.

COMPANY

From a monetary perspective, it can be very beneficial for an employee to work remotely, especially if we are talking about consulting. The cost to for office space and relocation expenses can run \$50,000. If the employee is consulting and traveling to the client site each week, the travel expenses alone will run \$60,000 a year. Depending on the rates charged, this savings could pay for 1-2 months of consulting services with the cost of travel.

Productivity is increased because less time is spent traveling to and from work. Also, it is easier for a remote employee to respond to personal needs; therefore getting back to work sooner. Having the proper set up at your home office makes it more convenient to work after hours.

Working remotely expands the pool of qualified candidates when hiring because the company is not restricted by geographical boundaries. If your company is looking for a specialized skill set, expanding the geographical boundaries is crucial. Companies can attract candidates that otherwise would not consider the company. Being employed by a company who supports working remotely makes happier and more loyal employees. Working remotely is a benefit that most people can't get elsewhere. Therefore, they are less likely to leave.

By having remote workers, a company can have a presence across the country at a very minimal cost. All you need is a phone, computer, printer, and internet access. VSS provided me with a laptop, printer, high speed internet access, and cell phone. We now have an office in the Dallas/Ft. Worth area. We have ears to the ground and can easily attend local user group meetings, visit with Dallas Oracle personnel, and potential clients.

One of the key benefits is the responsiveness of the employee/consultant. By having your office in your home, the employee can quickly respond to requests. If you think about it, a lot of time is spent on the road traveling to and from work. In addition, at times it is necessary to run home during the middle of the day. These are times that when the employee is unavailable. Also, it is easier to adjust your schedule around the client/company needs. For example, the client project manager begins her work day at 6:00 a.m. my time. Although my scheduled working hours are 7:30 a.m to 4:30 p.m., I normally start working around 6:00 a.m. to make sure that there are not emergencies. Normally at 7:00, I take a 30 minute break. In effect, VSS is getting extra client coverage from me, at no cost to VSS or to me! I end up putting in "more time" because I don't have to commute to the office each day.

TOOLS AND TECHNIQUES

EQUIPMENT AND SOFTWARE

Working remotely offers many benefits, but how does a company address the logistical issues? At VSS, we have tried different options, some working better than others.

Communication is a key factor, so VSS researched and tried many different communication options. Below are the different options:

- Business Phone – We discussed putting an additional phone line in the house, but my concern was it would be one more line that telemarketers could call and interrupt during working hours.
- VOIP – This might be an inexpensive way to create a network of phones. People can call the home office and be transferred to my extension without knowing that I am hundreds of miles away. The downside of VOIP we found is that we would randomly be disconnected during a phone conversation—not ideal situation for a professional environment.
- Home Phone – I use my home phone the majority of the time when I am making out-going calls. The downside of using your home phone is that it is unavailable for personal use. So if you have someone else home during the day, sharing the phone may become an issue.
- Cell Phone – In today's mobile world, a cell phone is a must. My cell phone is what clients use to contact me.

Initially, we tried using my cell and home phone with a decision that if that didn't work we would add phones. Later, we added VOIP, so we could have a VSS network phone system. Disconnected calls made VOIP nor a viable solution. For the most part, having just a home and cell seems to meet the needs.

We use instant message a great deal, so we don't interrupted with phone calls. Trillian is a product that allows you to have multiple login to different instant message (IM) providers. If your office uses Yahoo, and your client has MSN, you can be signed on to both using Trillian and view a consolidated list of your contacts. IM is less disruptive if the receiver is concentrating on projects or on the phone. The downside with IM is that sometimes VPN firewalls will not allow IM traffic through. For non-immediate items, e-mail works best.

For meetings, using a combination of conference calls and web conferencing seems to be a good mix. We discussed using

video conferencing, enabling us to see the faces, but in reality we normally want to see each other's computer screens, not see people via a video conference. There are several options for conferencing. Larger organizations probably already have something internally set up for both conference calls and web conferencing. We have used freeconference.com for conference calls and YUGMA and Microsoft LiveMeeting and NetMeeting for web conferencing. Sometimes there is a struggle when using web conferencing where someone isn't able to connect. For this reason a back up plan is strongly recommended.

Of all the tools that are out there on the market, today, high speed internet is what has made working remotely a viable option. The big recommendation to a company considering remote users is to confirm that they have access to a **reliable** high speed internet company.

We use Virtual Private Networking (VPN) a great deal. If you are working on multiple clients, you will most likely have multiple VPN client software packages installed on your PC. Sometimes, different VPN software doesn't play well together. FTP is the preferred way of transferring files. FileZilla, (FTP software), offers a nice user interface for transferring files. VNC Remote Desktop and Microsoft Remote Desktop are good options for accessing a computer remotely.

PROCESSES

You now have a list of great tools at your disposal. How can you make all these tools work during the life cycle of the project?

For requirements and design, we meet with the client via conference calls and web conferencing. We gather the requirements and either build mock-up screens or a prototype. For screen mock-ups we e-mail them back to the team before our next meeting. A second meeting is scheduled to either review the screen shots or demo the prototype. The downside to conference calls is not being able to see the faces of the people on the room. You lose the ability to read expressions of the clients. Internally, we address this issue by trying to let each other know what we are thinking. For example, if we are talking about a design and there is no response on the other end of the phone, normally that person will say "thinking" meaning "I am not disagreeing or unhappy, just give me some time to think about it."

Remote development is an interesting topic. Having the employee in one place, the company in another, and the client somewhere else, can be tricky. Rarely does a project only have one developer. Our development normally will happen on our server in Kansas City. If we have more than one person needing to develop at one time, we will either take turns developing or we will create a copy of our database, make the needed changes, and when the development database is available merge the changes into a master copy. Keeping track of the changes and making sure you are not overwriting something is crucial. Communication helps between team members prevents overwriting of work. In practice, with only two developers, we have not had a problem with this.

Once the development is done, it is now time to migrate the code over to the client's server. Most of the clients have their own development, QA, and production server. Due to firewall issues, sometimes it is necessary to FTP the files down to the personal PC or laptop then login to the clients VPN. Below is a diagram show the process of migrating the code from our development server to the client's development server. The files can be copied and transferred in under 30 minutes. Depending on what is in the code release, the testing can take hours or days.

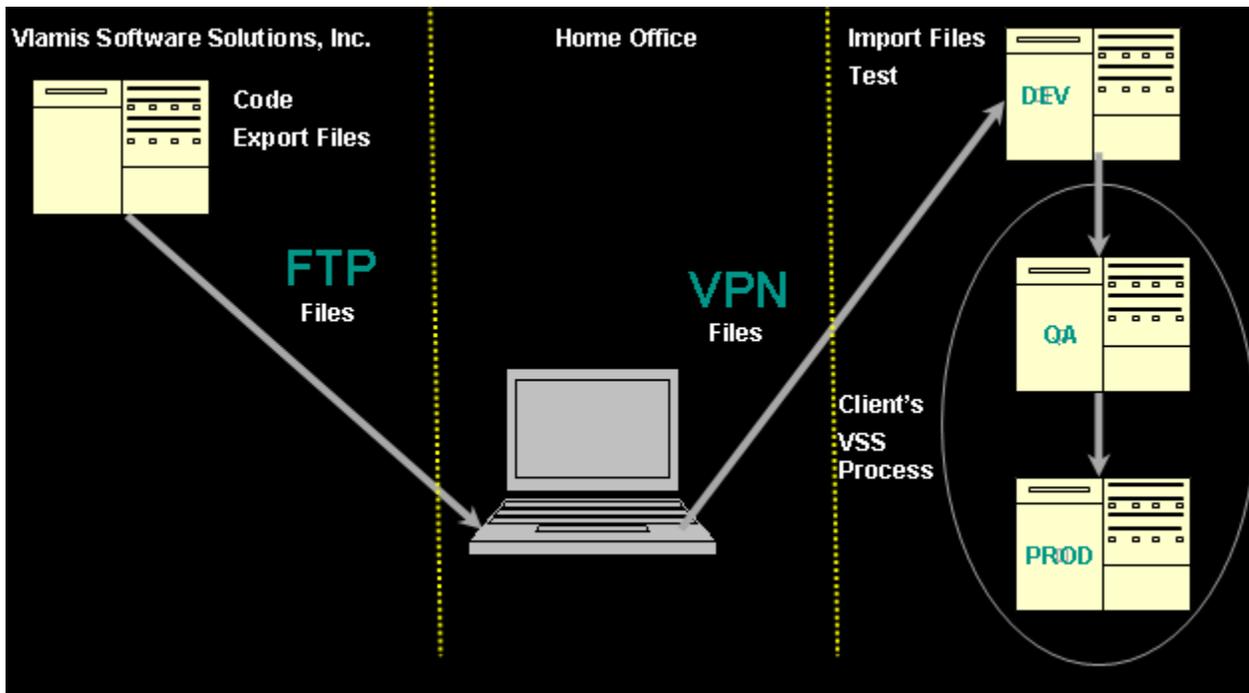


Figure 1 – Code Drop Process

Once the code has been tested and approved by the client, they have an internal process that moves the new code from their development to QA then to production.

What can be time consuming is emergency fixes. Although thorough testing was completed by the client team, there are times when the code makes it all the way to production before we realize there is a bug or something that needs to be changed. When this happens, we may make a change directly to the production system and need to synchronize the code back to our development server. Below is a diagram with the reverse migration path.

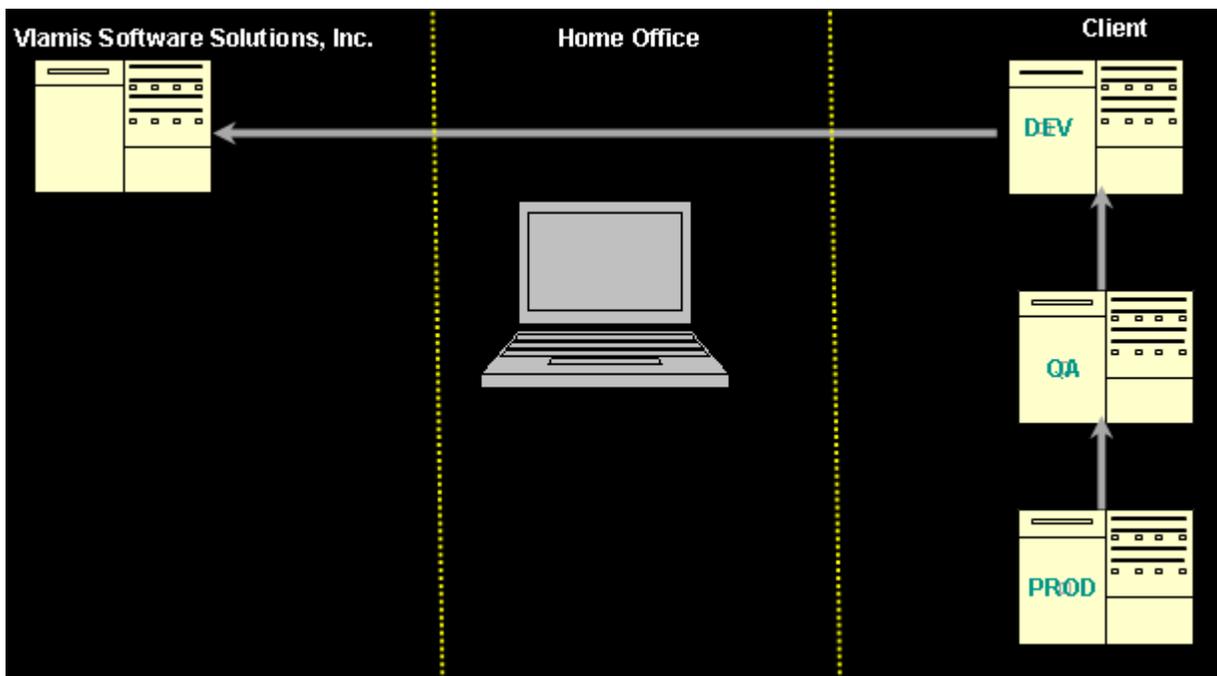


Figure 2 – Emergency Fixes

From the diagram above you can see that it is necessary to change 4 databases. Even if it is just a small 5 minute fix, it will take at least 30 minutes to log into the different servers and make the changes. The good news in this case, is the tool that we use to make changes to the code will allow us to access our company database even if we are VPNed into the client's site. Otherwise it would be necessary to log out of VPN to make the changes on the development server.

HANDLING OBSTACLES

EMPLOYEE

Before having an employee work remotely, make sure they look at the different obstacles and ask themselves some questions. Below are some questions an employee should think about before considering a position where they are going to work remotely. Included are suggestions that the employee might find helpful.

1. How will I keep from feeling disconnected from coworkers and/or clients?

Some people just like to do their job, while others want to feel a part of the team. For those who want to feel part of the team, the following will be helpful:

- a. Phone Calls – it is o.k. to ask about something other than work?
- b. E-mails – it is o.k. to send something personal every now and then?
- c. Lunches or Happy Hours – are there other remote employees to visit?

2. Will it be difficult to working alone everyday?

It is possible, especially if you are a people person. The following will help you during the business day.

- a. Go out to lunch once – twice a week

- i. Co-workers
 - ii. Customers / Potential Customers
 - iii. Family and Friends
- b. If you have a hobby, spend a lunch hour enjoying your hobby.
 - c. Do volunteer work at lunch

3. What if I have laptop issues that need to be resolved quickly?

For those who know little about hardware, it can be challenging not having someone that can take look at your computer when it acts up. I found the following has helped me a great deal:

- a. Allow a remote support person to remotely access your machine.
- b. Call 800 tech support numbers
- c. When you go on vacation, take your laptop in to be serviced by a local representative.

Generally, this works well, but there will still be times when you have to take the computer into to be fixed immediately. Normally the service company will work with you to keep the disruption of service to a minimum.

4. Will it be difficult to focus on work?

TV, dishes, laundry, kids, spouse, pets made this question a very big concern for me. The list will change from person to person, but all homes offer many distractions from work. By taking the steps below, I found that this lack of focus on work is a non-issue.

- a. Have a separate area in your house that serves as an office
- b. Set standard work hours for yourself
- c. Set up rules with household members about office work hours and expected behavior

5. Is it difficult to turn your work off at night?

When considering taking a position to work remotely, not being able to turn off my work never entered my mind. I had always left work at the office. I only worked after hours if there was a pressing matter. Having your work there with you all the time, makes it easy to migrate to it after dinner on the weekends. My first year, I found myself working just to work at night. If you are finding this true, try the following:

- a. Set standard work hours – working past those hours should be for last-minute requirements or emergencies.
- b. Keep the laptop in the office if it is tempting you to work all hours for no real reason.
- c. Don't feel guilty.

6. Is it difficult to keep a professional environment?

It can be difficult to keep at professional environment when working from a home office. Addressing potential issue in advance can keep an unprofessional environment to a minimum.

- a. Outside noises:
 - i. Dogs - keep barking dogs away from the office when you are using the phone.
 - ii. Children – if you have an in-house nanny watching young kids, make sure she understands the working rules. Toddlers can't understand.
 - iii. Doorbells – Put a note on the door saying don't(?) use the doorbell during business hours.

- b. Keep equipment working properly
 - i. Keep phones charged at all times. Have a spare battery/phone close by for long conference calls.
 - ii. Ensure you have good clear signal when using the cell phone
 - iii. Speaker phones need to have a clear quality
 - iv. If you are using VOIP phones, remember they can disconnect you
 - v. Keep laptop and all internet equipment well maintained

COMPANY

Companies considering having remote employees or consultants should also think about the different obstacles that might come up. Planning and preparing in advance, can make the transition a smoother process. Below are questions that companies should consider:

1. How will we communicate with each other?
 - a. E-mails – Usually work great for non-emergencies. Keep in mind that sometimes when using VPN, the person may not be able to access their e-mail.
 - b. IM – VSS' preferred method of communication for quick questions or to see if someone is available to talk. Some VPN firewalls won't let you access IM, and you must remember to turn it back on when you disconnect the VPN.
 - c. Phone Calls – Good for complex questions, but frequent interruptions can sometimes cause a person to lose his or her train of thought if they are focusing on project work.

2. Will my client relationship suffer?

There are a three of areas to address when we are talking about the client relationship.

- a. Missed opportunities - if you are onsite, people might see you in the hall or at your desk and think to ask "Does your company help with ..."
This one is tough and there is no way to overcome it 100% but try to make visits to see the client on a regular basis and see first hand what is going on around the company.
- b. Loss of business - Some companies have varying opinions on consulting companies working remotely. If one of the decision makers has an issue with not seeing the consultant in the office every day, then your company will be at risk of losing the business.
To minimize this risk, initially, the consultant may need to spend time on-site with the client. Once the client the trust level is built, working remotely is less of an issue.
- c. Building a personal relationship – not as easy to talk about non-business related topics that you might do when you are working side by side and going out to lunch.

Take a few minutes every now and then to find something about your client team. Don't be afraid to talk to them about personal subjects during a conversation. Take the quiet time during a phone conversation when maybe be waiting on a process to finish running or at the end of the phone call to talk about something other than work.

I found that one of my clients one of my clients enjoys watching the television show "24" as much as I do. Sometimes we talk about it on Tuesday. If something really shocking happens, we may send each other and e-mail after the show. Our daughters like American Idol – another great subject. Why should these sorts of interactions be limited to in-person relationships?

3. What happens when technology fails?

Technology will fail and it always seems to happen just at the wrong time. Having a back up plan is a must, but sometimes that isn't good enough.

- a. Have multiple ways of communicating
 - i. Web conferencing through more than one service
 - ii. Conference Calling
- b. More than one phone (a cell phone is a must)
- c. Have more than one way to upload and download files:
 - i. Remote Desktop
 - ii. VPN
 - iii. FTP
- d. Have a secondary place you can work if you lose you internet service. With internet technology as it is today, there are several options.
 - i. Borrow a neighbor's connection – I had a single neighbor that worked during the day, and he said I was welcome to use the connection at his house anytime.
 - ii. Share wireless with neighbor – even if both of you have secured wireless internet connections, offer to trade the codes.
 - iii. Family – I borrowed an office at my husband's work when we moved and we were without internet access for a week.
 - iv. Internet Cafes – (but can be loud and unprofessional).

4. How do I keep the employees feeling part of our team?

If your company has more than one remote employee it will be a balancing act. Each person perceives the value of team building meeting and events differently. So looking at the different options, keep in mind that one person may feel that you providing too much team building while another feels like more needs to be done.

- a. Company conference calls – We normally have one every month or so. I personally feel we don't have them enough, but a co-worker would like to see fewer. This number will vary company to company.
- b. Company meetings
 - i. How often – again will vary and probably not everyone in company will agree
 - ii. On-site - nice to have everyone at the corporate office, but this can invite interruptions
 - iii. Off-site – can go to a nice place without distractions, but it can be more of an effort in planning
- c. Encourage remote employees to get-together - try to meet with a co-worker in your area at least once a month. It is nice get away from the home office.

5. How do I know remote workers are really working?

If decision makers were honest, this is probably the number one obstacle that keeps many companies from allowing remote users, but a manager doesn't need to visually see an employee working to know they are getting their work done. If this is really a concern, I would argue that a consulting company doesn't have the trust level necessary to succeed.

- a. Are they meeting their deadlines?
- b. Are they normally available when you try to contact them?
- c. Are you receiving complaints from others concerning the remote worker's responsiveness?

The answers to the questions above will let you know if your remote employee is working.

SUMMARY

Working remotely may sound simple at first, but there is a great deal that must be considered when working remotely. For us, the benefits outweigh the cost.

Over the past 6 years that I have worked for Vlamis Software Solutions and we have had a monetary savings of:

- Employee - \$84,500
- Company - \$180,000
- Client - \$300,000

With companies looking to cut cost, allowing employees to work remotely can give them a significant strategic edge, especially if those companies look specifically for consultants that want to work remotely. The amount saved in travel can free up funds that can add a great deal to the work on the project. The non-tangible benefits of happier, more productive employees, increased employee response, and retaining quality employees are even a greater benefit than the cost savings.

When I asked my client to provide me with feedback on clients working remotely, he responded that he felt it had been a good experience and provided me with the key reasons below:

1. "You are very responsive. You get back to us quickly when we have questions or problems."
2. "You are easy to contact and make yourself available. You let us know if you will not be available."
3. "You know our applications well."

Working remotely isn't necessarily the best for all instances, but if the situation is right and a plan is well thought out, it can be a great success. Know your employee and your company and address any obstacles in advance. A well thought out plan can be the difference between a disaster and a great success.