

## **Gnome store summary**

Building an online store from a technical standpoint is not difficult. Some of the technical details are not trivial, but there are plenty of skilled GNOME contributors who have the experience to setup a store.

The business issues are not trivial, and they must be well thought out before the store is built. I have 6 years of e-commerce experience ([www.nationalgeographic.com](http://www.nationalgeographic.com) and [www.timelife.com](http://www.timelife.com)), and I've found that the business rules are the most problematic. They need to most watching, lead to the most discussion, and require more revision than the hardware or software that make up the site.

These issues may already be understood by all parties, but as I'm not privy to every conversation, I'd like to review them.

### ***Technical***

There are two general areas of concern, setting up the servers, and building the applications.

### **Servers**

The GNOME store requires a secure HTTP server, a database, preferably running on a private server. The server must be hardened. I believe the server is planned to play the role of the store, or at least to store the Foundation's very private data.

I suggest Apache + OpenSSL for the secure Web server, and Postgresql. for the database. Other options are available, but I'm not particularly concerned about them. There are many knowledge contributors to GNOME, and if other servers are wanted, then I won't argue.

Time is the crucial factor in planning the servers.

1. What is the priority to assemble a store server?
2. Is there a schedule?
3. Who is responsible for the domains and certificates?

The store and database requires a guarantee of uptime.

1. How often may the store go down, and for how long?
2. Should there be a backup in case the store goes offline?
3. I don't image that site traffic will lead to performance issues, but what is the goal for maximum visitors per hour and donations per hour?
4. How long can the donor database be unavailable?

## **Applications**

The GNOME Store requires a small set of logic to interact with the donor database and the credit card authorization service. The store could be no more than the Friends of GNOME page plus some forms to capture the donor's information.

Trustcommerce provides almost a dozen toolkits to connect to their services. Since PHP is used already used in the GNOME Web sites, it would be the easiest to integrate. The PHP requires no more than 40 lines of code to do credit card validation and authorization.

Postgresql is well integrated into PHP and already used by the GNOME sites—so both are ideal. Postgresql's transactional capabilities are very desirable when dealing with scenarios where users are making donations at the same time a Board Member is pulling a report.

The scope of the store might be the existing Friends of GNOME page with the addition of an FAQ, and some forms to collect donor information. The store could be extended in the future to provide a Web catalog experience and or donor/customer account services.

1. Will someone be responsible for setting up the products offered with the donations?
2. Will there be promotions or limited offers tied to donations?
3. Should the store have international/localizable content?

The donor database will require some stock reports that can be run on a scheduled and ad hoc basis. The specifics of the reports will be learned in due time. Access to the reports is an issue that must also be dealt with.

1. How should access be granted, via password, certificate, ssh?
2. Who can run them?
3. From where can the reports be run?
4. Are some parts of the donor data less sensitive than others?

I envision board members logging onto a secure area of the Web server where reports can be create and or run. The reports will display in a browser and can be saved to the desktop in a portable format. Users may need to export the entire donor database to a portable formation so that reports or analysis can be done by other applications.

## **Business**

There are two general topics that must be discussed for an online store. Customer service and privacy policy are big issues in e-commerce.

## **Customer service and fulfillment**

The GNOME foundation must clearly define the limits of what customer service the store will provide. Consider that the PayPal service currently handles user credit card validation and authorization, user accounts, and browser issues with an FAQ page, via email, and phone. I'm sure the Foundation already deals with donor questions via email, and Ximian may be dealing with payment and shipment issues.

Users frequently access their online accounts. The store's simplicity, separating payments from donor information, does not relieve it from managing donor accounts. Donors may wish to review their account and order information, and they may want to edit some of it. Simply stating in the FAQs that the user doesn't have an account does not address problems for user who will make several donations/purchases.

1. What should the donor do when he does not understand the forms and the FAQs did not help?
2. What should the donor do when his questions are not answered?
3. What should the donor do when his credentials cannot be authenticated?
4. What should the donor do when the donor's information cannot be validated?
5. What should the donor do if the payment information is not authorized?
6. Who manages the inventory and fulfillment of the products?
7. What should the donor do when the product has not arrived?
8. What should the donor do if the product cannot be shipped to his address?
9. What should the donor do if the product is broken on arrival.
10. What should the donor do when his browser wont work with the store?

In short, users that see a store will want Friends of GNOME to behave like a store. If the store is successful in drawing new segments of donors, more customer service issues will arise. All these questions may be non-issues, or will not be an issue until the store generates enough business to justify spending more resources on its upkeep.

## **Privacy policy**

Clearly the donor list is a very valuable resource for the Foundation. I cannot find any documentation about the Foundation's privacy policy or terms of use. Donations are different than purchases, but some potential donors might be deterred if the Foundation does not publish

its intentions.

1. What is GNOME's privacy policy?
2. What is GNOME's terms of use?
3. What kind of promotions does the Foundation send to the list of donors?
4. Does the Foundation sell and rent lists?

### ***Final thoughts***

If the Foundation cannot commit the resources needed to guarantee a store, than another approach is needed. The Foundation does need to own its data, and have the tools necessary to query the donor database to get the answers to its questions. I think the Foundation should focus on the promotion of GNOME, and leave the customer service and fulfillment issues to a third party. The Foundation needs to manage the product offers, their presentation, and the terms of sale/donation to guarantee the quality of the GNOME brand. The business of running a store would be better left to a party that can dedicate the resources necessary to keep donors satisfied.