CHAPTER 3

XBOX Live

INFORMATION IN THIS CHAPTER

- Introduction
- What is XBOX Live?
- Creating an XBOX Live account
- Getting connected

INTRODUCTION

XBOX Live is a two-prong Web portal that provides a portal for online gamers to connect, socialize, and interact with one another over the game console. It is two pronged in that there is a Web portal as well as the portal that the gamers use to connect using their XBOX 360 console. These two vectors to access the portal work together to notify the end user that there are messages to be read, listened to, or otherwise provide a reason why the end user needs to log onto the portal. Most messages, such as e-mails, can only be reviewed through the console interface and the end user will be prompted through an e-mail to his or her associated Gamertag, to log into his or her console through the Web portal under these circumstances. Games that are sold for use in the console are enabled to connect to the network for cooperative or competitive game play. In addition to console games, there are several games that are provided for use on Windows-based PCs that allow gamers on computers and consoles to experience the network cooperative or competitive game play.

To illustrate the need for an examiner or investigator to be concerned about this console and network game play, we have already addressed some of the criminal activity that has occurred using the XBOX Live service as the network communication vector. It is always nice to have facts to back up assertions, and while these news clips were provided regarding the criminal activity, it is not known how wide spread the use of the paid service is on XBOX Live and just how many of these consoles are in circulation. A news article from January 6, 2009 on Gamespot News provides
some very interesting statistics on the number of XBOX 360 consoles that have been sold. According to the report, there are 28 million XBOX 360 consoles that have been sold, with an estimated 17 million users of the XBOX Live service [1]. This statistics shows that although there are many consoles sold, not every console will be connected to the Live service. With this many users and this many consoles in the “wild,” it is only a matter of time before the devices and their functionality combine to add to the list of devices that forensic examiners must contend with.

The Web portal can be found at www.XBOX.com/en-US/live/ and is the starting point to connect the console to the XBOX Live portal. Figure 3.1 provides a screenshot of the XBOX Live portal home page.

FIGURE 3.1
The initial page for XBOX Live.

WHAT IS XBOX LIVE?
There is no better description of what the XBOX Live service is than the one that is provided by the makers of the console. Figure 3.2 provides the description of the service as it is provided on the Web portal.

In short, XBOX Live can be considered an online portal that can be accessed through Windows-based PCs, original XBOX consoles, XBOX 360 consoles, and research indicates that Microsoft has plans to expand access to include Windows-based smart phones. This new initiative is called Live Anywhere and was introduced in late 2006. The company has long-term plans for the development of Live Anywhere. “Gates was on hand to introduce XBOX Live Anywhere, the company’s
What is Xbox LIVE?

Xbox LIVE is an online gaming and media delivery service.

With Xbox LIVE you can:

- Download games or game add-ons such as new songs, levels, and characters.
- Invite your friends to connect, chat, and play along.
- Instantly watch thousands of movies and TV episodes.

![FIGURE 3.2](image)

XBOX Live description from the XBOX Live portal.

new initiative to unite your gaming opportunities across multiple platforms. XBOX Live Anywhere, according to Gates, will be cross-platform, regardless of the device you’re using” [2].

The point is that gaming is no longer a pastime simply for the socially inadequate (no offense to the gamer world). Gaming has evolved with each generation, and it is now perfectly acceptable for someone, in his or her 20s who is waiting in line at a bank, doctor’s office, restaurant, or amusement park to be playing a video game of some sort to pass the time.

From the perspective of a high-tech crime investigator, this interconnectivity provides a wealth of information for network connections, personal contacts, e-mail lists, and digital artifacts that may not make a case, but may provide the necessary vector or initial contact that may be the missing link or missing puzzle piece to an investigation or examination.

**TIP**

Gaming consoles of today are being explored by many organizations for their social networking capabilities. In addition, the virtual reality world of gaming has evolved into a recruitment tool for several organizations. Several organizations, such as the United States Army, have developed games to assist in their recruiting efforts.

The XBOX Live portal provides users with at least four networking features. Once the account is created, users are able to take advantage of these features. However, it must be mentioned that XBOX Live is available in two formats, a free service and a commercial service, referred to as Silver and Gold memberships, respectively. The Silver membership is currently free with the purchase of a console and provides several features such as game downloads and voice and text chatting. In order to get the most out of the portal, meaning all the functionality that is offered, a user will have to pay for a Gold account. XBOX Live requires a user to pay for a subscription, although only a modest $49.99 fee, which includes all game map updates and other downloadable material that is on a paid-for basis with other
game console portals. Figure 3.3 provides a synopsis of the differences between the Silver and Gold memberships.

Another perspective of the services offered for each of the memberships is provided in Table 3.1. Although this is not a comprehensive list of all the services, it does provide an overview of some of the major network functions.

**Table 3.1 Comparison of Some of the Functions Available with the Silver and Gold Memberships**

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Silver</th>
<th>Gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice chat</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Video chat</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Downloadable content</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Multiplayer gaming</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Netflix</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Facebook</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Twitter</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Creating an XBOX Live Account and Getting Connected

To get connected to the portal, a user must first sign up for the service, similar to creating a Web-based e-mail account. This initial process is done through the Web portal, not on the console, and simply involves following the steps provided through the process. All that is required is an e-mail account. This e-mail account is linked to the XBOX Live account for records tracking, which can be used for investigations and information requests that can be sent to Microsoft for logs pertaining to the account. Research indicates that the original IP address at the date and time of the initial sign up are archived by Microsoft.

TIP
In order to have Microsoft pull its logs for investigations of this nature, there is a fee that accompanies the request. Although Microsoft is helpful to the law enforcement community, they need to recoup the costs associated with the logging and retrieval of information. Contacting Microsoft for these records can be accomplished by calling, e-mailing, or faxing the request. The contact information is located in several places; one location is at www.search.org/programs/hightech/isp/default.asp#189, and it can also be found under Microsoft or Hotmail searches.

The XBOX Live service has undergone changes throughout its life span. The service itself was released in conjunction with the original XBOX console back in November of 2002. Since that time, the service has evolved to include functionality updates and aesthetic upgrades to provide the user with a more social look and feel. Figure 3.4

Xbox Dashboard

The Xbox Dashboard is displayed when you turn on your Xbox console without a disc in the disc tray. You can use the Xbox Dashboard to adjust system settings, including audio, video, language, and memory management and you can save games and create soundtracks.

There are two versions of the Xbox Dashboard. The first is the standard dashboard that was available when the product released. The second is a "Live" version of the Xbox Dashboard that contains additional functionality for those customers who have purchased an Xbox LIVE Kit. The only difference between the two versions is the addition of the Xbox LIVE capabilities. The Xbox LIVE version of the Xbox Dashboard is now included with all new Xbox video game systems.

FIGURE 3.4
XBOX Dashboard descriptions [3].
provides a description of the Dashboard. The current user interface for the XBOX Live console is called the dashboard. The dashboard is available in two versions: the original version, which was supported with the original XBOX console that provided the ability to adjust system settings, and the new Live version of the dashboard provides, which support for the advanced functions of the Live service already mentioned. According to Microsoft, the new Live version of the dashboard is included on all new XBOX 360 consoles.

Social networking has been a wealth of information for high-tech investigators for many years now, and the ability of the XBOX 360 console to connect to these sites through the XBOX Live service was realized in November 2009 with an XBOX Live update. Although not all the features of a regular Web interface are provided with the XBOX Live application, the basic functionality is still there, leaving artifacts for the examiner to contend with.

There are three social networking applications that are available for the XBOX 360, two of which have been known to the high-tech investigations and examination community for years: Twitter and Facebook. The third social networking application is the XBOX Live service itself. Like their desktop counterparts, the Twitter and Facebook applications for XBOX Live attempt to create more network linkage over this hardware device by providing search features so that the gamer or end user can search to find his or her “friends” who are also on XBOX Live. Figure 3.5 provides a screenshot of the Twitter application as it is used over the XBOX Live service. Figure 3.6 provides a screenshot of the Facebook application as seen on XBOX Live.

**FIGURE 3.5**
Depiction of the Twitter application for the XBOX 360 console [4].
CREATING A LIVE ACCOUNT

As of publication of this writing, the first step to creating a Live account is to navigate to the Web portal. The portal is available at www.XBOXlive.com, and the creation of an account is akin to creating a Web-based e-mail account. Once an account is created, the user is then prompted to configure his or her console and log on with the XBOX Live account that is created through this portal. This prompting is done through a confirmation e-mail that is sent to the entered e-mail account to confirm registration.

The main page, depicted in Figure 3.7, provides more information as to the functionality, displaying these features in call-out bubbles:

- Free game demos
- Social networking
- Customized avatars
- Streaming HD movies

The first step in the process of creating an account is to select Experience XBOX Live from the main page in Figure 3.7. Once selected, the process begins by prompting the user for some information, including date of birth, region, and an e-mail account. Figure 3.8 provides a screenshot of this Web page for sign up.
FIGURE 3.7
XBOX Live main Web page.

FIGURE 3.8
Initial sign-up page of XBOX Live account.
Creating a Live Account

The next step in the process is to determine the Gamertag that will be used. This Gamertag is a unique identifier, similar to an e-mail address that is created by the user and is tied back to their e-mail, as well as being the log-in credentials that will be used on the console.

Because of the number of users, Microsoft XBOX Live account creation prompts the user to determine if the selected Gamertag is available for use (See Figure 3.9).

Personalization of the Gamertag is the next step in account creation. Each Gamertag has an avatar associated with it, that is, a picture representing the gamer. There are several default images that can be used for this avatar. As the user interacts with the portal and other users more, he or she may earn enough points on the XBOX Live portal to further customize his or her avatar. Figure 3.10 provides an overview of some of the default avatar images available to the end user.

Because of the nature of the XBOX Live portal, there will be a wide range of users that the portal will appeal to. In fact, it would only make for a good business decision for Microsoft if they attempted to market the XBOX 360 console and the XBOX
Live service to the broadest range of users. In order to appeal to this wide audience, the XBOX Live portal provides four distinct gamer “zones” for the Gamertag to be associated with during account creation. These zones are listed in Figure 3.11, and are also listed here as follows:

- Recreation: designed for casual game play
- Family: designed for family fun and entertainment
- Pro: competitive gamer action
- Underground: gaming at the next level of competition

**SUMMARY**

This chapter introduced the concept of the XBOX Live portal and its associated user-interaction capabilities. The gamer needs to create an account through the normal Web interface using a standard Web browser. The process for Gamertag creation is straightforward, and once it is completed and the information is confirmed, the end user has opened the door to a gaming social network. The functionality of the console, once an XBOX Live account has been created, is where the interests of a high-tech investigator or forensic examiner should be piqued. The functionality of the console from this point forward is akin to a networked computer, complete with social networking capabilities, streaming media, voice and text chat, and e-mail and video.

**References**


