SYSTEM AND METHOD FOR INTELLIGENT CASINO CONFIGURATION

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ABSTRACT
Certain embodiments provide systems and methods for adaptable control and configuration in a downloadable and/or server-based gaming environment. Systems and methods allow hypothetical or trial reconfiguration of a gaming floor and analysis of game performance. Systems and methods also monitor game play and provide one or more recommendations to a player and/or gaming terminal. Multi-site and local progressives may be provided for play via a downloadable and/or server-based gaming system. Tournament game play may be facilitated via the downloadable and/or server-based gaming environment.
Figure 1
Figure 2

240

242 - Review gaming environment floor configuration.

244 - Evaluate criteria.

246 - Determine new floor configuration.

248 - Adjust floor configuration.

250 - Select a game at a gaming machine.

252 - Verify certificate associated with the game.

254 - Play the game.

256 - Generate feedback.
Figure 5

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendances</td>
<td>Occurs every weekday effective 7/9/2005 from 9:59 AM to 11:59 AM</td>
</tr>
<tr>
<td>Meetings</td>
<td>Occurs every weekday effective 7/9/2005 from 11:00 AM to 5:00 PM</td>
</tr>
<tr>
<td>HiFive</td>
<td>Not scheduled</td>
</tr>
<tr>
<td>Blinky Island</td>
<td>Occurs every weekday effective 7/9/2005 from 5:00 PM to 6:59 PM</td>
</tr>
<tr>
<td>Memberships</td>
<td>Not scheduled</td>
</tr>
<tr>
<td>Masaray</td>
<td>Occurs every weekday effective 7/15/2005 from 12:00 PM to 6:00 PM</td>
</tr>
<tr>
<td>Knable Fights</td>
<td>Not scheduled</td>
</tr>
<tr>
<td>Moony Quarters</td>
<td>Not scheduled</td>
</tr>
</tbody>
</table>
Figure 7

- Display game art on floor map
- Display denomination
- Display background floor map
- Display current activity on EGM
- Display bank activity for
  - Live
  - Averaged over the past 4 hours
Figure 8
Figure 9

Coupons are available from your Aristocrat representative. Type the coupon code and click the Apply button to view offer and accept terms.

Coupon code: [ ] [ ] [ ] [ ] [ ] [ ]

$5,000 off $50,000 purchase or larger

[Redeem Coupons] [Cancel]
Figure 10
Figure 11
Figure 12

Tournament Options
Choose your tournament options

- Assign players to EGMs
- Allow players to use any EGM
  
  Player ID will be determined by the player's card.

Game: Easter Island

1200
### Machine Assignment

Assign players to the EGM they will play on.

<table>
<thead>
<tr>
<th>Bank</th>
<th>Slot</th>
<th>Player</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>789080</td>
<td>John Smith</td>
</tr>
<tr>
<td>2</td>
<td>723810</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>147662</td>
<td></td>
</tr>
</tbody>
</table>

EGMs in tournament: 3  
Assigned EGMs: 1

1300

Figure 13
<table>
<thead>
<tr>
<th>Name</th>
<th>ATI Tournament</th>
<th>EGMs:</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Fixed-time</td>
<td>Bank</td>
<td>2</td>
</tr>
<tr>
<td>Start</td>
<td>Immediately</td>
<td>Slot</td>
<td>2</td>
</tr>
<tr>
<td>End</td>
<td>N/A</td>
<td>Player</td>
<td>2</td>
</tr>
<tr>
<td>Game</td>
<td>Easter Island</td>
<td>John Smith</td>
<td></td>
</tr>
<tr>
<td>Configuration</td>
<td>1 round(s)</td>
<td>Jane Doe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 minute rounds</td>
<td>Fred Jones</td>
<td></td>
</tr>
<tr>
<td>Assigned EGMs</td>
<td>798880</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>723810</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>147662</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 14
### Table: EGM Performance

<table>
<thead>
<tr>
<th></th>
<th>Average Hold%</th>
<th>% of Coin In</th>
<th>% of Win</th>
</tr>
</thead>
<tbody>
<tr>
<td>This Machine</td>
<td>6.00%</td>
<td>47.06%</td>
<td>54.50%</td>
</tr>
<tr>
<td>House Average</td>
<td>5.19%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Figure 15**
FIG. 17

1700

1710 → Select one or more games for trial.

1720 → Adjust floor configuration.

1730 → Test the adjusted gaming floor configuration.

1740 → Generate performance data.

1750 → Analyze performance data.
Fig. 18

1800

Game Monitor

Gaming Terminal

Gaming Terminal

Gaming Terminal

Gaming Terminal

1820

1821

1822

1823

1830
FIG. 19

1900

1910 → Monitor game play.

1920 → Process monitored game play data.

1930 → Provide one or more game play recommendations.
FIG. 20

2000

Display available progressive and game play options for download and/or server-based play.

2010

Select a progressive and game for play.

2020

Make a progressive contribution based on wager and/or other criteria.

2030

Play progressive game.

2040

Award progressive prize.
FIG. 21

2100

2110 Select a tournament for play.

2120 Configure gaming terminal for tournament play via download and/or server-based gaming.

2130 Play tournament game.

2140 Award tournament prize.
SYSTEM AND METHOD FOR INTELLIGENT CASINO CONFIGURATION

RELATED APPLICATIONS

[0001] This application claims priority to, and is a continuation of, co-pending U.S. application Ser. No. 11/938,100 having a filing date of Nov. 9, 2007, which is incorporated herein by reference, and which relates to, and claims priority from, a continuation-in-part of co-pending U.S. patent application Ser. No. 11/459,232, filed on Jul. 21, 2006, entitled “System and Method for Intelligent Casino Configuration,” which claims priority to U.S. Provisional Application No. 60/701,731, filed on Jul. 22, 2005, entitled “System and Method for Intelligent Casino Configuration,” which are herein incorporated by reference in their entirety. The present application also relates to, and claims priority from, U.S. Provisional Application No. 60/865,289, filed on Nov. 10, 2006, entitled “Systems and Methods for Casino Floor Optimization in a Downloadable or Server Based Gaming Environment,” U.S. Provisional Application No. 60/865,285, filed on Nov. 10, 2006, entitled “Casino Download System and Method Including Player Choice,” U.S. Provisional Application No. 60/865,290, filed on Nov. 10, 2006, entitled “Download Systems and Methods for Multi-Site or Local Progressive Games;” and U.S. Provisional Application No. 60/865,280, filed on Nov. 10, 2006, entitled “Systems and Methods for Providing Tournament Play in a Casino Downloadable/Server Based Gaming Environment,” which are herein incorporated by reference in their entirety.

BACKGROUND OF THE INVENTION

[0002] This invention relates to casino configuration and management, and more particularly relates to a system and method for dynamic or predetermined casino configuration and management.

[0003] Gaming machines, such as slot machines, fruit machines, or poker machines, have in recent years become one of the more popular, exciting, and sophisticated wagering activities available at casinos and other gambling locations. At the same time, gaming machines have also become a source of greater revenue for gaming establishments. Thus, competition between manufacturers of gaming machines has intensified as competitors vie for business from gaming establishments.

[0004] A large gaming casino typically employs thousands of gaming machines that can be operated simultaneously. A gaming system providing entertaining and enticing features for players would be highly desirable to attract both new and returning players to a gaming establishment. Additionally, a gaming system that allows customization and dynamic or predetermined modification by an operator would be highly desirable to provide new features to customers. Current gaming machines are difficult to reconfigure and offer the same game to multiple users at multiple gaming establishments. Certain games may become old or unattractive to players and need updating or replacing. Thus, an improved system and method for reconfiguring gaming machines would be highly desirable.

[0005] Additionally, manual reconfiguration of a gaming machine by a human operator raises concerns regarding security of data and integrity of a game on the gaming machine. That is, gaming establishments and legal authorities place high priority on the integrity of a game, such as a slot or poker game. Thus, there is a need for a configurable system that does not disturb sensitive game or prize data and reduces possibility for human error in gaming configuration. Manual configuration may not be effective to match the desires of players for game content, denomination ($0.01, $0.25, $0.50, $1.00, $5.00 for example) appearance or operational mode. Operational mode may include configuring terminals for tournament play (e.g., free play by the participants of the tournament using the same starting stake of free credits), promotional games, test games or the like. To acquire and manually change out or convert to new games with a conversion kit (signage, processor boards, button pads, etc.) requires significant time and manpower. Thus such systems are not well suited to dynamically change to optimize the business operation of the casino, e.g., profits from the floor in response to the market and player demands.

[0006] Currently, casino floors include a wide variety of electronic gaming machines, such as video slot machines, poker machines, reel slot machines and other gaming machines. In order to adapt to changing situations and improve slot play, slot managers adjust the location and configuration of these gaming machines. Physical placement of games on the casino floor as well as manipulation of working parameters of the games on the casino floor is an important aspect of casino management.

[0007] Determining an “ideal mix” of game types, locations, denominations, and other parameters is widely regarded as an art or inexact science. A mix or configuration of games may vary from venue to venue, day to day, and/or hour to hour, for example. Thus, an ability to rapidly adjust a casino floor configuration (in whole or in part) would be highly desirable. A system that monitors configuration changes as well as player response to configuration changes would be highly desirable. Additionally, a system that may automatically change floor configuration on a periodic basis based on predefined parameters or detected play patterns on the gaming floor would be highly desirable. The historical data obtained versus various configurations would be useful to help operators make decisions as to gaming floor configurations.

[0008] It has been proposed that gaming systems include selecting games from a large variety of game content stored on a centralized game server for subsequent download and play on a local terminal. Regulatory approval and issues of security have slowed what is perceived to an inevitable shift to downloadable games at a casino. Given current technology, it is now possible to virtually move games around the casino floor or change parameters within the games on the game floor from a central location without physically accessing the games. Downloadable gaming systems also give a player or casino operator the freedom to choose the game played on a given gaming machine. Selecting a desired game from a list of hundreds of available games may be a time-consuming task, however, and assisting the player in a choice of game through a number of metrics based on player preferences or other factors would be highly desirable. As stated above, current downloadable gaming systems also present challenges to regulatory officials. For example, game integrity and/or game license monitoring may be difficult for regulatory officials and gaming operators to monitor. Providing a system and method through which regulators may monitor and/or control game content would be highly desirable.

[0009] Thus, there is a need for a system and method that allows adaptable control and configuration of a gaming envi-
There is a need for a system which provides for the operator or player to reconfigure one or more gaming terminals and for a system which provides the operator with the opportunity and flexibility to optimize the casino floor based upon various parameters. There is a need for a system and method where reconfiguration commands may be paused or interrupted in the event certain conditions exist. There is a need for a system and method which provides for easy designation and reconfiguration of any terminal on the casino floor.

**BRIEF SUMMARY OF THE INVENTION**

**[0010]** Certain embodiments provide a system and method for adaptable control and configuration of a gaming environment. Certain embodiments provide a gaming environment configuration system including a plurality of gaming machines capable of executing game content for play by one or more players and a configuration manager configured to receive information regarding available games and the plurality of gaming machines. The configuration manager generates one or more configurations for the plurality of gaming machines. Configuration (or reconfiguration when a terminal is already configured) may be of game content, terminal appearance, denomination or operational mode. Content relates to the game type, theme, controls and/or secondary games, for example, to be implemented at the terminal for play by the customer. Appearance may include color (terminal, panels of the terminal, displays, etc.), background, borders, adding or subtracting displays, shape and broadly includes sound characteristics as well. Denomination relates to the denomination for the game, e.g., unit wager value/value of credits wagered. Operational mode relates to whether the terminal is configured for regular game play, tournament play, free play, promotional play or the like or is placed in a disabled mode such as, for example, maintenance, a tilt condition, regulatory request or order or the like.

**[0011]** Certain embodiments provide a graphical user interface (GUI) system allowing an operator to configure a gaming environment. The system includes a map representing a layout of a gaming floor in the gaming environment, a game library including games available for download to a gaming terminal on the gaming floor, and a configuration control capable of allowing the operator to download a game from the game library to at least one gaming terminal on the gaming floor. In an embodiment, the configuration control allows the operator to change information displayed on at least one gaming terminal display on the gaming floor.

**[0012]** The system may also include a layout editor enabling the operator to edit a layout of the gaming floor displayed on the map. Additionally, the system may include a profile manager for creating a gaming floor configuration and saving the configuration in a profile. Furthermore, the system may include a tournament manager for configuring tournament play with gaming terminals on the gaming floor.

**[0013]** Certain embodiments provide a method for gaming floor configuration, the method includes selecting one or more games from a server for remote operation or download in a trial configuration on a gaming floor. The method also includes adjusting, on a trial basis, a configuration of devices on the gaming floor based on the one or more selected games. The method further includes monitoring game play in the adjusted gaming floor configuration to generate performance data. Additionally, the method includes analyzing the performance data from the adjusted gaming floor configuration to provide a gaming floor configuration recommendation.

**[0014]** Certain embodiments provide a method for providing suggestions to players in a downloadable or server-based gaming environment. The method includes monitoring game play, via server, by at least one of one or more players at one or more gaming devices. The method also includes analyzing game play data generated from the monitoring step to identify at least one of a pattern of play and a popularity of play. The method further includes providing a game play recommendation, based on the at least one of a pattern of play and a popularity of play, to at least one of the one or more players for play in the downloadable or server-based gaming environment.

**[0015]** Certain embodiments provide a method for progressive play in a downloadable or server-based gaming environment. The method includes displaying, at a gaming device, one or more progressives and associated games available for play via a gaming server. The method also includes allowing a player to select from the one or more progressives to participate in the associated game via the gaming server or downloadable configurator. The method further includes activating the associated game for play with the selected progressive via the gaming server or downloadable configurator.

**[0016]** Certain embodiments provide a method for tournament selection and play in a downloadable or server-based gaming environment. The method includes displaying available tournament games at a plurality of gaming devices via a gaming server. The method also includes facilitating selection of a tournament game from the available tournament games. The method additionally includes configuring, via the gaming server, a plurality of gaming devices for tournament play with the selected tournament game. The method further includes activating the selected tournament game at a gaming terminal. In addition, the method includes executing play of the selected tournament game.

**[0017]** Certain embodiments provide a system providing game content in a downloadable or server-based gaming environment. The system includes a plurality of gaming devices providing game play to a plurality of players. The system also includes a gaming server including a plurality of games available for play at the plurality of gaming devices based on user selection. The gaming server includes a configuration manager for configuring and managing the plurality of games for play at the plurality of gaming devices. The system further includes a graphical user interface allowing a user to configure the plurality of games at the gaming server. The configuration manager provides two or more of the following games for configuration of the plurality of gaming devices based on user selection: a) one or more games available for gaming trial on one or more of the plurality of gaming devices for a predetermined time period, wherein the configuration manager collects game play data from the gaming trial for analysis; b) one or more recommended games for play on one or more of the plurality of gaming devices based on monitored data identifying at least one of a pattern of play and a popularity of play of games from at least one of the plurality of gaming devices and a plurality of monitored players; c) one or more progressive prizes and one or more associated games to be played one or more of the plurality of gaming devices for the one or more progressive prizes, the configuration manager facilitating selection of a progressive prize for which to play and selection of an associated game to be played for a chance to win the progressive prize; and d) one or more tournament
games available for tournament play at the plurality of gaming devices, wherein the configuration manager configures the plurality of gaming devices for tournament play for a predetermined time period upon selection of one of the one or more tournament games.

BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWINGS

[0018] FIG. 1 illustrates a casino network system used in accordance with an embodiment of the present invention.

[0019] FIG. 2 illustrates a flow diagram for a method for configuration of a gaming environment used in accordance with an embodiment of the present invention.

[0020] FIG. 3 illustrates a graphical user interface (GUI) capable of configuring and managing a gaming floor in accordance with an embodiment of the present invention.

[0021] FIG. 4 depicts an example of a profile management interface used in accordance with an embodiment of the present invention.

[0022] FIG. 5 shows a profile status list used in accordance with an embodiment of the present invention.

[0023] FIG. 6 depicts a configuration options interface used in accordance with an embodiment of the present invention.

[0024] FIG. 7 illustrates a preferences interface used to configure GUI user preferences in accordance with an embodiment of the present invention.

[0025] FIG. 8 illustrates a credit management interface used in accordance with an embodiment of the present invention.

[0026] FIG. 9 illustrates an example of a coupon redemption interface used in accordance with an embodiment of the present invention.

[0027] FIG. 10 depicts a tournament setup interface used in accordance with an embodiment of the present invention.

[0028] FIG. 11 illustrates a tournament scheduling interface used in accordance with an embodiment of the present invention.

[0029] FIG. 12 shows a tournament setup options interface used in accordance with an embodiment of the present invention.

[0030] FIG. 13 shows a tournament machine assignment interface used in accordance with an embodiment of the present invention.

[0031] FIG. 14 shows a tournament summary used in accordance with an embodiment of the present invention.

[0032] FIG. 15 shows an example of a graph charting gaming machine performance used in accordance with an embodiment of the present invention.

[0033] FIG. 16 illustrates a new game query interface used in accordance with an embodiment of the present invention.

[0034] FIG. 17 illustrates a flow diagram for a method for trial gaming floor configuration in a downloadable or server based gaming environment in accordance with an embodiment of the present invention.

[0035] FIG. 18 illustrates a game play monitoring system used in accordance with an embodiment of the present invention.

[0036] FIG. 19 illustrates a flow diagram for a method for game recommendation in a downloadable and/or server-based gaming environment in accordance with an embodiment of the present invention.

[0037] FIG. 20 illustrates a progressive game play monitoring system used in accordance with an embodiment of the present invention.

[0038] FIG. 21 illustrates a flow diagram for a method for tournament play in a downloadable and/or server-based gaming environment in accordance with an embodiment of the present invention.

[0039] The foregoing summary, as well as the following detailed description of certain embodiments of the present invention, will be better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, certain embodiments are shown in the drawings. It should be understood, however, that the present invention is not limited to the arrangements and instrumentalities shown in the attached drawings.

DETAILED DESCRIPTION OF THE INVENTION

[0040] Referring to FIG. 1, a casino network system 100 includes a plurality of gaming terminals 110, 120, and 130 interconnected through network 140 to a slot accounting and/or player tracking system 150 (hereinafter collectively referring to as a player tracking system), slot floor configuration manager 160 and certificate manager 170. It should be understood that, while the present description refers to gaming terminals as “slot machines”, that gaming tables such as Blackjack, Pai Gow, Baccarat, multi-terminal gaming machines such as multi-terminal roulette, Sik Bo, Poker, dice games, and others may be subject to reconfiguration where such tables are so adapted. As an example, a gaming table layout may be embodied as a video display, and reconfiguration may be of a type to reconfigure the video layout to change the game to be played at the table, bonus features, minimum and maximum bets and the like. Thus gaming terminal as used herein includes gaming tables as well. It should also be understood that configuration or reconfiguration of a gaming terminal includes both an initial configuration and subsequent reconfiguration of the gaming terminal to download and/or otherwise provide (e.g., server-based) a game and/or other functionality to a player at the terminal.

[0041] Player tracking system 150 and slot floor configuration manager 160 are connected to database server 180 via a communication link 185, which may be integrated with or separate from the network 140. Slot floor configuration manager 160 and certificate manager 170 are connected to game database server 190 via a communication link 195 which may be integrated with or separate from network 140. In an embodiment, the casino network system 100 may be implemented in another gaming environment, such as a hotel, restaurant, theater, store, airport or other venue having one or more gaming systems.

[0042] System 100 also includes a system workstation 200, connected to network 140. In addition, one or more self-service kiosks 210, and/or one or more external systems 220 may be connected to network 140. External system 220 is connected to network 140 through firewall 225, and may include a player workstation in a hotel room or other location external to the casino, for example. One or more kiosks 210 may be used to facilitate operations such as slot ticket redemption, player card point redemption, change and/or currency dispensation, promotion redemption and/or issuance, advertising, information, event or dining reservations and/or ticketing, etc. For example, one or more kiosks 210 and/or external systems 220 may be used to purchase and/or view sports scores, news, game announcements, weather, flight information, show times, specials, reward tickets, prize tickets, coupons, airline or show tickets, reservation confirmation, or other information, for example. Additionally a
player may be able to locate his or her favorite games on the casino floor, restaurants or other facilities and/or services at a kiosk 210.

[0043] Gaming terminals 110, 120, and 130 include communications interfaces (CI) 115, 125, and 135 respectively, which communicate with network 140. In other embodiments, CI 115, 125, and 135 may instead communicate with player tracking system 150 via other system and/or method, such as a serial communications protocol. In an embodiment, CI 115, 125, and 135 may be integrated into a game controller for gaming terminals 110, 120, and 130. Certain embodiments of a CI are described in more detail below.

[0044] Player tracking system 150 collects data from CI 115, 125, and 135 for purposes of slot accounting, monitoring and security, and player tracking as is well known in the art. Player tracking system 150 processes and stores said data in database 180. Additional information regarding slot accounting and player tracking is described in more detail below.

[0045] Slot floor configuration manager 160 receives information relevant to slot floor configuration management from player tracking system 150 and database 180. For example, slot floor configuration manager 160 may include an interface to player tracking system 150 to facilitate transfer of information between manager 160 and tracking system 150. In an embodiment, slot floor configuration manager 160 receives information from a database separate from database 180 used by player tracking system 150. In an embodiment, slot floor configuration manager 160 may receive floor configuration information independent of player tracking system 150. Slot floor configuration manager 160 also may receive information directly from gaming terminals 110, 120, 130. Gaming terminals 110, 120, 130 may be connected to slot floor configuration manager 160 and/or player tracking system 150 via separate networks or a common network, such as an Ethernet.

[0046] Slot floor configuration manager 160 processes information to determine and/or suggest configurations of gaming terminals on a gaming floor, such as a casino floor. Slot manager 160 reviews, adjusts, and approves suggested floor configurations via system workstation 200. In an embodiment, players may be provided with an ability to select desired games to be played or downloaded to a terminal via CI 115, 125, and 135 and/or gaming terminal 110, 120, and 130. Players may also review game information or update their profiles via kiosk 210 or external system 220, for example. In another embodiment the casino may have the authority to "push" selected games to gaming terminals 110, 120, and 130 and the player has no ability to select or override the selection. In another embodiment both the casino and the player have the ability to select from the available games.

[0047] System 100 may also include external system 230, which is connected to certificate manager 170 via a dedicated, secure, communications link via firewall 235, for example. External system 230 may be a workstation in a gaming regulator's office, for example. In one embodiment, gaming regulators may monitor and manage game certificates on certificate manager 170 via external system 230. Unless required by a particular jurisdiction, the certificate manager 170 and associated equipment and functions may not be required.

[0048] Certificate manager 170 is configured to allow access to games to be controlled for a given gaming environment, such as governmental regulators or gaming operators acting in compliance with gaming regulations. The certificate manager 170 may work with a certificate database to control access to the game(s) being played. For example, the certificate database may include encoded and encrypted digital certificates or other authentication/license indicators that tie to games in the game database on a one-to-one basis. In an embodiment, due to the nature of the games and gaming terminals, a game may not be played unless a valid certificate for that game exists in the certificate database. In an embodiment, a certificate is also a token to a venue, such as a casino or other gaming environment, so that a game may be played only in or at the venue even if the game and certificate were electronically duplicated and moved to another venue.

[0049] In an embodiment, a certificate may also be related to a binary image of a game file, such that a game may not be played if the binary image is modified. If a modification or update of a game image is a result of an unauthorized action, a new certificate may be issued by a regulator before the game may be played. Games lacking a valid certificate may be handled differently in a player's game catalog interface. In an embodiment, games lacking a valid certificate may be excluded from a player selection interface altogether. In an alternate embodiment, games lacking a valid certificate may be excluded from certain portions of a player catalog and/or visibly marked with an appropriate descriptive phrase such as "Pending approval for play in this casino".

[0050] In an embodiment, certificates may be implemented such that the number of concurrently playing games of a given title may be limited by regulators or a game provider, for example. In an embodiment, certificates may be implemented such that a number of concurrently playing games from a given game provider is similarly limited. In an embodiment, the certificate database may be implemented to facilitate a total number of games being concurrently played at a given venue, if regulations enforce such a limit, for example.

[0051] In an embodiment, regulators have access to the certificate database, either through an interface local to a gaming environment or through a remote interface such as a web-based interface through a dedicated and encrypted network link between the venue and the regulator. Through this interface, the regulator may manage the certificate database to approve games for play or similarly revoke approval of games, for example.

[0052] In an embodiment, the casino floor configuration system 100 uses historical data as well as stored information regarding available games to determine and suggest, or in certain instances command, available game configuration(s) or mix for the casino floor or other gaming environment. Such a mix may include, for example, game location(s), game denomination(s), game content, game appearance, terminal operational mode and/or additional parameter(s) such as volatility, return to player (RTP), etc. In an embodiment, the system 100 may change a gaming environment floor configuration automatically. For example, rules, preferences, calendar-based schedules, and/or historical data may be used by system 100 to automatically reconfigure a gaming environment. As a few examples, the denominations of games may be changed to higher denominations for periods such as holidays and weekends where tourists or conventioners are expected and lower denominations during the week for local players. Where a large influx of tourists is expected, game play may be converted from, for example, video Poker games to video slot machine games which may be more popular with the expected demographics of the patrons. Historical data may also be used to control or suggest a configuration regime. Prior successful configurations may be accessed and duplicated and even tied to calendar events,
e.g., reconfigure for the Christmas Holiday the same as last Christmas. Where players are entitled to select configurations, a historical record may be maintained with respect to player requested configurations and the same may be analyzed to set up configurations for the casino floor.

[0053] As used herein, reconfiguration refers to an initial configuration, installation or access to a gaming terminal and/or gaming and other software running on or via the gaming terminal. Additionally, reconfiguration encompasses both downloading games and/or other software to a gaming terminal and making games and/or other software available at the gaming terminal (e.g., server-based gaming).

[0054] In an embodiment, the slot floor configuration manager 160 may include a workstation with an intuitive and easy-to-use interface, such as a visual representation of the casino floor with installed gaming terminals 110, 120, 130. For example, the workstation includes a display. The manager 160 controls the display to display the position of terminals on a casino floor and to display with each terminal (or group or banks of terminals) data or a visual reference corresponding to at least content then resident on each terminal. For example, each terminal may be shown in association with at least one of a number, letter, label, icon and/or other indicator. As a specific example, each gaming terminal has associated therewith a graphic icon representing game content such as a representation of a unique game symbol, trademark, or other pictorial so an operator may determine at a glance a resident configuration of each terminal. Using a data input device such as a mouse, keyboard, remote control or touch screen, the operator may enter a prompt at a selected icon whereupon the processor is controlled to display further details such as denomination, performance, maintenance history, game history, or the like. In this fashion, individual terminals or whole banks of terminals may be reconfigured in a “drag and drop” manner. The gaming terminals 110, 120, 130 may be selected individually and/or in groups for configuration changes, for example. In an embodiment, an operator and/or system may view and/or change gaming terminal 110, 120, 130 information and/or configuration using the configuration manager interface. Using the floor configuration manager 160, an operator may change a game available for play at a gaming terminal 110, 120, 130 and also information display via a primary and/or additional display at gaming terminal 110, 120, 130.

[0055] In an embodiment, the system 100 may be configured to lock down portions of a gaming environment. For example, an area of a casino floor may be designated as the “video poker” area. In the video poker area, operators may want to allow any video poker game to be played or downloaded while disallowing downloading of other types of games in this area, for example.

[0056] In another embodiment, gaming terminals in a gaming environment may be configured for a field trial. A field trial typically runs for 30 days, for example. Games on field trial are made available for play during the field trial and, the slot configuration manager 160 helps ensure that field trial game(s) are available on a specific set of terminals.

[0057] One or more terminals or banks of terminals may be configured for tournament play or other special event, for example. When in a tournament play configuration, play may be free to players. Play may be based upon free and/or prepaid/preset credits being loaded in the game, e.g. 1000 credits, or the terminals may be configured to be enabled for a period of time for free play. In an embodiment, players pay an initial fee to “buy in” to a tournament. Participating gaming terminals are then placed in a “tournament mode”. In an embodiment, terminals in tournament mode are temporarily removed from slot accounting so that meters accrued during tournament play are not included in standard slot accounting. In an embodiment, participating terminals are initialized to play continuously for “free” during the allotted tournament time period. Alternatively, a set number of credits may be allocated to a participating terminal for tournament play. At the end of the period, the net win of each terminal is used to measure the contestant’s performance and top winners are awarded a prize. During tournament play, reconfiguration of the terminals involved may be paused. Additionally, one or more displays on participating gaming terminals may display information and/or graphics related to tournament play. An example of tournament play is described in further detail in U.S. Pat. No. 6,039,648, which is herein incorporated by reference.

[0058] In an embodiment, a secondary screen (such as a secondary screen in a top box of an electronic gaming machine) may be used with a gaming terminal to display tournament information, such as tournament standings and statistics. The tournament statistics screen may display information such as tournament leaders and point standings, time remaining in the tournament, player standing with respect to the leaders (such as place in the tournament, points, and/or a number of points separating the player from the closest competition), and/or other information. At the conclusion of the tournament, the secondary display shows tournament winners, prizer(s) won, and/or other information, for example.

[0059] In an embodiment, a screen displaying game identification information and/or graphics may be modified to display tournament identification information and/or graphics. In an embodiment, the system 100 may be used for additional operational modes including taking a terminal out of service for maintenance, configuration and/or in case of a tilt condition (malfunction), for example.

[0060] In an embodiment, a gaming terminal may include one or more configurable buttons, such as NKK™ Smartswitches™, touchscreen button deck, or configurable button panel. The face of each button may include an enabling display of the button function. Colors may vary as well, for example. The buttons may be programmed by the slot configuration manager 160, workstation 200, and/or automatically based on game information/configuration, for example. For example, as a game is selected, reconfigured and/or replaced at a gaming terminal 110, 120, 130, the buttons may be programmed, displayed or enabled to accommodate functionality of the game.

[0061] Games may be defined by a “slot type,” for example. Parameters that make up a slot type may include game title, denomination, return to player, style of game and/or bonus feature(s), for example. A particular game may be available in denominations from 5 cents to $100, for example. In an embodiment, a full range of denominations may not be applicable to all areas of a casino floor. For example, higher denomination games may only be available in a high limit area. One slot type for a particular title may be created for denominations from $5 to $100 for use in high limit gaming, and another slot type may be created for denominations of 5 cents to 25 cents for other parts of a floor. The system 100 may select from the available slot types for a particular title when making recommendations to the slot manager. In an alternative embodiment, a predetermined protocol may be estab-
lished for certain areas of the casino floor such as, for example, a High Limit area. In this instance, if an operator or download routine attempts to download or make available a 5 cent game into the High Limit area, the download may be paused and an error message generated to remind the operator that the game is inappropriate for the terminal in the High Limit area. Thus the operator may make a conscious decision to override the high limit only protocol for the terminal. Alternatively, the 5 cent download or server request may be cancelled or overridden.

The system 100 may function with the player tracking system 150 to determine player profiles. The system 100 may use player profile information to suggest, offer, include and/or exclude players from certain games or parameters, for example. Player profile information may be used by the slot configuration manager 160 to configure or suggest a configuration or server based game for a gaming terminal 110, 120, 130 at which a particular player is playing, for example. Additionally, the system 100 may suggest games to a player based on factors such as historical data, game rating, game availability, player preference, player ranking, player access, player credit, newest games, most popular games based on statistical tracking of game play, most popular games based on customer ratings and reviews, events in the vicinity of the gaming terminal, etc. For example, the system 100 may offer selected games to a player which other players have like based upon the present game.

In an embodiment, the system 100 provides players with an ability to select games from a list extracted from an entire suite of games available to the system such that the extracted list of games is based upon games preferred by a player including other games of similar character to games appealing to that player based on player history. In an embodiment, a game may include different outcomes according to choices made by a player at various points during play of the game.

In an embodiment, the system 100 provides operators with an ability to select games to be available for play on one or more gaming terminals. Games may be available to an operator based on authorization, gaming jurisdiction, casino affiliation, account information, available credit, etc. An operator may purchase or activate games for a certain amount of money or credits or via coupon from a game provider, for example. For example, a casino slot floor operator may download or make available games for gaming terminals on the casino floor using available credits in his or her account. If an operator or gaming environment's account balance is low or has been exceeded, an operator may add credits to an account. For example, an operator may access a web site or other interface or click a button or tab to "buy" additional credits to acquire the rights/ability for the game/feature. The new game code may be provided remotely as through an Internet connection or by a memory device such as a CD from which the operator can load the game. Games provided by a read only memory device such as a CD may require the operator to authorize the game from the provider so the provider can (1) be sure the operator received the game, (2) log the operator in and authorize the game, (3) confirm the game is correct for the operator's jurisdiction and (4) if the game has a recurring revenue component place the operator on a payment schedule.

In an embodiment, the system 100 may include a number of templates describing suggested floor layouts for a given venue based on factors well known in the industry. Templates in whole or part may be saved to the live casino floor as desired. In an embodiment, templates may be loaded, saved, and/or modified by the slot floor configuration manager 160, for example.

In an embodiment, the system 100 includes an offline experimental or "what if" mode that allows casino personnel to experiment with various floor configurations. For example, the system 100 may show a predicted effect of configuration changes on a virtual floor such as by including several new or additional games from a game content provider. Based upon the performance of the games in other casinos, these "hypothetical" games could be included in a fictional floor configuration to show the operator how overall floor performance may be enhanced. Virtual floor layouts may then be saved and/or translated to an actual floor configuration as desired such as by the operator acquiring one or more suggested games in their library.

In an embodiment, the system 100 includes an ability to reconfigure a floor configuration in response to pre-programmed events, such as time of day, day of week (or month), certain events occurring in or around the venue, and the like. For example, prior to a highly anticipated event, such as a Monday Night Football game or sports tournament, electronic gaming terminals outside a bar or other venue hosting a special event related to the game may be shifted to favor sports-minded games.

In an embodiment, a player uses credits to download, select, and/or play a game (on EGM credit meter, player account, and/or inserted at an EGM 110, 120, 130, for example). In an embodiment, the system 100 allows one or more players to play multiple games on one terminal simultaneously (dividing a game screen into four windows, for example, with four games playing simultaneously).

In an embodiment, a plurality of games may be stored locally on a gaming terminal. Contents of a gaming terminal may be configured based on a game selected on the terminal by a player, rather than forcing a download or server based game of a game onto the terminal to change the configuration. Game content may be updated on a periodic basis via a network and/or loaded locally at the terminal, for example.

Certain embodiments provide a plurality of features to players. For example, the system 100 may allow a player to search or browse in real time for a game (by title, genre, popularity, highest jackpot, etc.). While browsing, filters may be employed by the player to narrow the field being browsed, for example. The system 100 may provide a catalog to browse games (by manufacturer, etc.). The system 100 may make recommendations based on player profiles (e.g., "Players who like this game also liked this game"). The system 100 may also suggest games based on a denomination most played by a player, etc. The system 100 may suggest most popular games (perhaps at an extra charge or tiered entry), new releases, etc. Players may also search for and download or play progressive jackpot games which currently have the highest jackpot. In this fashion, the downloaded or server-based games may add to the progressive pool causing it to grow even faster. In an embodiment, players may be allowed to access features using a player card and/or account. A player may be granted access to certain features based on a number of player loyalty points, for example.

Certain embodiments allow a player to "vote" or provide feedback (ratings, etc.) for a game at a gaming terminal 110, 120, 130, kiosk, or external system, for example.
In addition, certain embodiments provide downloadable help files or reference materials that discuss features of a given game. Certain embodiments provide a free evaluation mode to allow players to evaluate games at no charge but with no payout for a win. The evaluation mode may be optional for a venue and may also result in awarding coupons, discounts, reward points, or other compensation to participating players, for example.

[0072] The above features, as appropriate, may also be made available through an interface such as a kiosk 210 on the casino floor or web-based interface external to the casino. Players may be able to access applicable information while away from the casino floor (for example, in a hotel room or home). The interface allows a player to learn about new games available at the casino or read peer reviews of games prior to going to the casino, for example. The player may add interesting games or other feature(s) to his or her list of “favorites” in a player profile for easy access while on the casino floor. In an embodiment, if a license or certificate is available for a desired game, a player may reserve the game at the kiosk 210 for play at a gaming terminal. Additionally, the kiosk 210 or other interface device may provide players with a site map or other casino information. The kiosk or web-based interface may enable players to find out where games are on the casino floor, jackpots and the like. For example, the kiosk 210 may provide a map or list of options to allow a player to locate a particular game or type of gaming terminal. The kiosk 210 or other interface may also provide a player with information regarding similar or alternative products, for example.

[0073] In an embodiment, a player may return to a hotel room, home or another venue to enter reviews of games played during a gaming session. The casino or other gaming environment may provide incentives for entering such reviews, such as by adding points to a player account or rating the reviewers themselves based on quantity and/or quality of their reviews, for example. In an embodiment, a player may be limited by the system 100 to only submit reviews for games that the player has played at the gaming environment.

[0074] In an embodiment, the system 100 may facilitate charging a premium for certain game titles based on given criteria, such as a new game, incentive bonus to game provider based on popularity, exclusive contract, game customized to certain geographic area, a premium or license fee may be charged for popular or new games. In an embodiment, the system 100 may also facilitate tracking of a game’s performance with respect to performance measures offered by a game provider, for example. The system 100 may also facilitate favored exposure for certain game titles in game catalogs shown to players in exchange for a game provider paying a promotional fee or offering a discount. For example, games or other features may receive favorable exposure in player catalogs for a fee or discount.

[0075] In an embodiment, information may be collected with respect to popularity of games and/or options within the games, for example. Information gathered may then be used to promote popular games to general and/or specific audiences.

[0076] FIG. 2 illustrates a flow diagram for a method 240 for configuration of a gaming environment used in accordance with an embodiment of the present invention. First, at step 242, a gaming environment floor configuration is reviewed. For example, current location and configuration of games on the gaming terminals may be reviewed. Then, at step 244, criteria are evaluated with respect to the current floor configuration. For example, historical data for a gaming environment, gaming terminal(s), and/or player may be evaluated automatically and/or manually. Evaluation criteria may also include time, special events, game availability, location, schedule, and/or other data for example.

[0077] Next, at step 246, a new floor configuration is determined. That is, a new floor configuration may be determined automatically and/or manually based at least in part on the criteria and other data evaluated in step 244. A new floor configuration of available games may be determined using a template, by selecting game(s) from an available library, etc. In an embodiment, a configuration management system suggests a new floor configuration to an operator based on historical data for the floor and other input/parameters. At a display, where the current configuration is shown by icons or other reference indicators or banners in association with the terminals shown by the display, a suggested reconfiguration may be shown by a ghost icon, image or banner in association with the terminals for a period of time in advance of the reconfiguration, for example. Then, at step 248, the floor configuration is adjusted. The floor configuration may be adjusted automatically, an operator may be prompted to adjust the configuration, and/or manual adjustment by an operator may be facilitated. In an embodiment, a floor configuration may be selected from one or more templates based on criteria and/or user input.

[0078] In an embodiment, one or more changes to a floor configuration may be scheduled in the system 100. For example, an operator may schedule a new floor configuration to be implemented at a certain time and/or for a certain time period. Thus, gaming terminals may be configured with certain games and/or in certain modes for one time period and with different games and/or in different modes for another time period. For example, an operator may schedule a casino to be configured to operate in a tournament mode beginning at 2:00 am the following day. A casino floor may be configured with certain games during a weekend and other games during the week, for example. Certain games may be played on gaming terminals during the day and others during the night, for example. Thus, certain embodiments enable advanced configuration and scheduling of gaming terminals in a gaming establishment.

[0079] It should be noted that when reconfiguration is commanded, the system 100 is preferably configured to include several override conditions which pause or prevent the reconfiguration. For example, where a player is playing a game, reconfiguration of the terminal may be paused or delayed until play is discontinued for a period of time, e.g. 10 minutes, to prevent interruption of play. Other conditions may be a maintenance condition such as when the terminal is opened for service or there is a malfunction, or play has been suspended but credits remain or payment of a jackpot is pending. Also, as stated above, conditions such as designated high limit area may prevent the download of certain games to those locations. Tournament play may delay reconfiguration until the tournament has ended, for example. The operator may also configure and input conditions which would block or encourage certain downloads, e.g. only certain games and the casino entourage to attract players, a percentage of the floor must remain video Poker, maintain a certain number of Blackjack tables because of the number of dealers on shifts and the like. In an embodiment, an operator may override a
configuration that has been suggested for automatic implementation by the configuration system.

At step 250, in the embodiments where a player may select configurations, a configuration (game content, terminal configuration, operational mode) is selected by a user at a gaming terminal. In an embodiment, a user may select from a plurality of games available at the gaming terminal. In another embodiment, a user may initiate a single game available at the gaming terminal. In an embodiment, a user may download a game from a database or collection of games for play at a gaming terminal.

Then, at step 252, a certificate or other authentication indicator associated with the game is verified. For example, a certificate associated with a game at a gaming terminal or other gaming console may be compared with a certificate database for the gaming environment to authenticate the game running at the gaming terminal. In an embodiment, a player may also be authenticated to verify the player’s access and/or authorization to play the game. For example, certain games may be made accessible to adults and/or to members of a casino’s players club or other group. Certification may be required depending upon the configuration of the system 100 and regulatory requirements, for example.

At step 254, the game is played. During play, the system 100, acting as a slot accounting system, monitors performance of the game, such as coin-in (amount wagered), jackpots paid (amount paid out), or maintenance events. The system 100, and more particularly the player tracking system server 150, tracks player identification if the player has logging in to be tracked. Next, at step 256, a player or other user may generate feedback for a game, gaming terminal, and/or gaming environment. For example, a player may complete a survey at a gaming terminal, a kiosk, and/or a hotel room evaluating a game played and/or another aspect of the player’s experience in a gaming environment. In an embodiment, feedback from a player is referenced in configuration of a gaming environment floor. Additionally, player preference data and other feedback may be stored for analysis and creation of player-based and/or floor-based profiles and/or templates. Furthermore, game and/or performance data may be compared to floor content to determine profiles, templates and/or recommendations for floor reconfiguration, for example.

In an embodiment, game(s), gaming terminal(s), and/or gaming environment(s) may be configured in an experimental or field trial mode to demonstrate and/or test one or more games and/or features. One or more games, gaming terminals, and/or gaming environments may be programmed for special events and/or schedules. Game(s), gaming terminal(s), and/or gaming environment(s) may be configured to accept different fees and/or offer different payback/reward for different games, gaming terminals, and/or gaming environments. Criteria set by an operator and/or system may impact programming, fees, and/or payback, for example.

In an embodiment, portion(s) of a gaming floor may be “locked down” or configuration restricted based on a schedule, game(s) played, and/or operator input.

In certain embodiments, for example, one or more games may be selected from a library, such as a vendor website, and imported into the configuration system 100. For example, an operator may visit a gaming vendor’s website to view and download game(s) for hypothetical or test configuration on their gaming floor or virtual gaming floor model. Alternatively and/or in addition, a dedicated portal or connection to a library of games may be made available through the system 100 for operator review and download.

An operator may then determine a hypothetical affect the one or more new games may have on a gaming floor, for example. Alternatively or in addition, the operator may use the system 100 to preview the new game(s) for a predetermined trial period. For example, the game(s) may include a preview period that may time out and end the game. That is, a computer-aided model may be used to simulate a gaming floor configuration and performance, and/or one or more game(s) may be made temporarily available on a gaming floor for players to try. Thus, one or more games may be tested or previewed on an actual gaming floor and/or a virtual model of a gaming floor, for example.

In certain embodiments, for a hypothetical gaming floor configuration, each game may have a performance statistic measured in one or more ways, such as empirically determined, handle/coin drop data determined, and/or otherwise determined, performance data. The performance data is used by the configurator system 100 (e.g., the configuration manager 160) to configure the gaming floor. Where the floor is hypothetically configured with new game(s), hypothetical floor performance can be determined based on one or more metrics and/or trends, for example. Where the games are actually downloaded to gaming terminals for play by players, actual performance can be measured.

In certain embodiments, the configurator system 100 may be used to view and/or one or more hypothetical combinations of game(s) already installed on the gaming floor under different conditions. For example, hypothetical combinations of new and/or existing game(s) may be created based on one or more criteria such as day of the week, hour of the day, time of the year, special event, and the like. Simulated predictions and/or hypothetical configurations may be generated on an ongoing basis so that an operator may determine an efficient gaming floor configuration over time, for example. In certain embodiments, various optimization techniques may be used to optimize or improve a gaming floor configuration with new and/or existing game(s).

FIG. 17 illustrates a flow diagram for a method 1700 for trial gaming floor configuration in a downloadable or server-based gaming environment in accordance with an embodiment of the present invention. At step 1710, one or more games are selected for hypothetical or trial configuration of a gaming floor. One or more games may be downloaded and/or provided via server, for example. At step 1720, a gaming floor configuration is adjusted based on the one or more new games. For example, the gaming floor configuration may be manually adjusted by an operator and/or automatically adjusted according to a template or other trial specification.

At step 1730, the adjusted gaming floor configuration is tested. For example, the adjusted gaming floor configuration may be provided to gaming patrons for live play. The adjusted gaming floor configuration may be provided to a closed group of testers for restricted evaluation, for example. The adjusted gaming floor configuration may be virtual simulated using historic, demographic and/or other data, for example.

At step 1740, performance data is generated from use of the adjusted gaming floor configuration. Data may be generated from actual and/or simulated play, for example. At step 1750, performance data is analyzed. Performance data,
such as game play data, winning percentage data and the like, from the adjusted gaming floor configuration may be compared to performance data from previous gaming floor configuration(s) and/or one or more industry and/or location benchmarks, for example. The gaming floor configuration may be restored and/or further adjusted, for example, based on analysis of performance data and/or other operator preference.

In an embodiment, the system 100 may be integrated and/or associated with a casino management system, such as a progressive management system. An example of a progressive management system is described further in U.S. patent application Ser. No. 11/059,479, filed on Feb. 16, 2005, which is herein incorporated by reference. The casino manager facilitates player tracking, slot accounting, game configuration, and bonusing, for example, in the system 100. The casino manager may be located for game configuration and modification for gaming terminals, for example. The casino manager helps to provide centralized management of a gaming environment, such as one or more casinos. Examples of gaming networks may be found in U.S. patent application Ser. No. 10/938,551 (filed Sep. 10, 2004), Ser. No. 10/938,103 (filed Sep. 10, 2004), and Ser. No. 10/935,514 (filed Sep. 7, 2004), which are herein incorporated by reference.

A management system may allow authorized users to configure games and/or progressive links/levels, including adding and removing games and/or progressive links/levels, meters, and/or setting jackpot reset amounts and rate of progression, for example. Reports, such as accounting, diagnostic and administrative reports, may also be generated. Information may be displayed at a remote terminal, gaming terminal display, overhead display, and/or other display, for example. One or more databases may be accessed to aid in report generation, game configuration, and/or other system adjustment, for example.

Additionally, a management system may facilitate player tracking, slot accounting, game configuration, and bonusing, for example, in a gaming environment. A gaming manager, such as an OASIS™ casino management system, may facilitate player tracking, slot account generation, ticket generation, marketing, reporting, crediting, and communication between players, gaming employees, and the system 100, for example. The gaming manager may be used for game configuration and modification for gaming terminals. The gaming management system helps to provide centralized management of a gaming environment, such as one or more casinos.

A gaming environment may operate using a multi-tiered architecture that includes a number of software layers including one or more applications, an application program interface (API), and an operating system. The applications provide a number of different services, including accounting services, player tracking services, progressive game services, browsing services, cashless play services, etc. The applications may be written in various languages including, for example, C#, Java, or SQL. The operating system, for example, is a Windows® brand operating system which provides conventional functions.

Gaming terminals may be implemented, for example, as slot machines, video poker machines, video roulette machines, and the like. Gaming terminals may be located in a local gaming environment, such as a casino, and/or a multi-site gaming environment, such as a plurality of networked casinos. Gaming terminals may be used to play a first game and/or multiple games employing one or more rewards.

A gaming environment may include a progressive server or other gaming server capable of storing input data for gaming terminals and output data from gaming terminals in a central database. In an embodiment, a central processing unit (CPU) operates through a network interface and communication lines to enable communication with local data processing units. Local data processing units may be used to divide gaming terminals into groups. Using a group-based architecture, transaction data from each group of games may be temporarily stored in the data processing units. The units may be structured so that the processing units include sufficient capacity and speed to accommodate the data generated by the games. Therefore, system performance may be improved and data integrity may be preserved in the event of a network or server error.

Processing units may also be designed to store data from database(s) that may be used by gaming terminals. Such data may be readily available for use by the games even if networks are disabled or if a server is disabled temporarily. As a result of these features, a gaming facility may remain operational even if some of its networks or a gaming server malfunctions.

In an embodiment, one or more progressive games or amounts may be facilitated using one or more progressive links and/or one or more levels within one or more links. A progressive link includes one or more gaming terminals contributing to one or more progressive amounts eligible for a win on any of the linked gaming terminal(s). A progressive link may include one or more levels or accumulating amounts. The progressive links may be running at one or more gaming environments, such as one or more casinos. One or more banks of gaming terminals in one or more gaming environments may be shut down for a variety of reasons. For example, terminal(s) may be shut down permanently or temporarily inactivated due to time of day, maintenance, time-limited bonusing, retiring a gaming terminal, reconfiguring a game or terminal, etc. A floor configuration system may be used to manage and adjust one or more progressive links and/or banks of gaming terminals.

In an embodiment, progressive games or other promotions may be configured using a progressive server, slot management system, remote device, such as a hand held device or off-site input device, or other system, for example. In an embodiment, multiple controllers may be connected to a suite of gaming products. For example, a network of gaming systems may include progressive links configured into tiered groups, such as single site, statewide, interstate, and/or multinational groups. In an embodiment, if one or more links or levels in a multi-site progressive is off-line, players at gaming terminals on an off-line or disabled link may be informed that the terminals are not currently participating in the progressive or may be disabled until the link is again functional. Additionally, in an embodiment, participants in both gaming and non-gaming activities may contribute to and/or win prizes from progressive links. For example, promotions offered at restaurants and theatres, as well as electronic gaming terminals connected to a progressive link, may offer a chance to win a progressive prize.

In certain embodiments, game play in a gaming environment may be monitored by an operator and/or exter-
Game play may be monitored within a single gaming environment and/or across multiple gaming environments (e.g., multiple casinos), for example. Game play may be monitored at a single gaming terminal, a bank of gaming terminals, a gaming floor of gaming terminals, multiple gaming floors of gaming terminals, etc. Game play may be monitored by software and/or hardware in a gaming terminal, for example. Game play may be monitored by software and/or hardware in an external system in communication with a gaming terminal, for example.

A system may monitor a variety of game play-related information, such as one or more of game selection, frequency of play, consistency of play, most recent play, coin in and/or coin out percentages, etc. In certain embodiments, a system may be configured to monitor a particular player and/or group of players. Based on games played by the player(s), the system may provide suggestions to the player(s) of other games they may enjoy playing. Suggestions may be presented based on a manual and/or automated analysis of game play-related information, for example.

For example, in a downloadable and/or server-based gaming environment in which players can choose games, the system can track players and their downloads to determine popular games and game families. Data may be analyzed to determine players that play an “X” game also routinely or statistically play a “Y” game. Based upon this data, the system can make recommendations to players as to other games they may enjoy.

For example, as shown in FIG. 18, a game play monitor 1810 monitors game play data from a plurality of gaming terminals 1820-23. Game play data may be separate from and/or integrated with data generated for player tracking and/or accounting purposes, for example. Game play data may be recorded at a particular time and/or as an aggregate over time, for example. Game play data is analyzed by the game play monitor 1810 and/or other external system to identify one or more patterns, probabilities and/or other statistic(s) from the game play data. Based on game play data analysis, the game play monitor 1810 and/or other external system provides one or more game play recommendations to a player 1830. Alternatively and/or in addition, the game play monitor 1810 may separately monitor game play data for each of the gaming terminals 1820-23. Game play recommendation(s) may then be made separately for each of gaming terminals 1820-23. In another embodiment, the game play monitor 1810 may monitor game play data for a particular player 1830. Game play recommendation(s) may then be provided to the player 1830 based on his or her playing habits and/or interests.

In certain embodiments, new games may be recommended to players for trial and/or regular play based on game play data, for example. In certain embodiments, a player may be allowed to provide one or more preferences, interests and/or other data to aid in providing game play recommendations to the player. As described above, game recommendations may be made in conjunction with data from a player tracking system, for example.

Game recommendation(s) may be provided in a variety of ways. For example, a display integrated with, connected to and/or positioned near a gaming terminal may display a graphical and/or video message or an activation feature for a suggested and/or new game. As another example, an audio message may alert a player to a game. In certain embodiments, a game recommendation and/or new game may automatically be activated at a gaming terminal. A player may receive an electronic message, such as an email or cellular phone text message, recommending a game.

FIG. 19 illustrates a flow diagram for a method 1900 for game recommendation in a downloadable and/or server-based gaming environment in accordance with an embodiment of the present invention. At step 1910, game play of one or more players (and/or gaming terminals) is monitored. For example, game play may be monitored via a player tracking system and/or other player card or identification-based system, gaming terminal tracking system and/or external monitoring system, for example.

At step 1920, monitored game play data is processed to identify one or more popular and/or otherwise recommended games. For example, game play data may be aggregated and compared to a certain threshold to identify one or more popular games. Game play data may be combined with one or more other criteria to identify game recommendation(s) for a player, a location, a type of gaming terminal, etc. Jurisdictional and/or regulatory criteria may also be a factor in game recommendation, for example.

At step 1930, one or more game play recommendations are provided. Game play recommendation(s) may be provided to a player, a gaming terminal, a bank of gaming terminals, a gaming floor, a group of gaming floors and/or other group, for example. Game play recommendation(s) may be provided automatically and/or made available for player access and selection, for example.

FIG. 3 illustrates a graphical user interface (GUI) 300 capable of configuring and managing a gaming floor in accordance with an embodiment of the present invention. The GUI 300 may work in conjunction with a gaming floor configuration system, such as the floor configuration manager 160. The GUI 300 depicts a plurality of gaming terminals 305, such as electronic gaming machines, available on the gaming floor. The gaming terminals are organized in banks 310. The GUI 300 also depicts a plurality of table games 330. Each gaming terminal is associated with one or more indicators 320-321. Each bank 310 is associated with an indicator 323. An identifier and game information are displayed for each gaming terminal 305 on the GUI 300. Available games for allocation are displayed in the game library 340. The GUI 300 further includes a menu/tool bar 350 providing a user with viewing, editing and reporting options, for example. The GUI 300 further includes a status bar 360.

The GUI 300 allows a user to view and modify games and activity occurring on a gaming floor, such as a casino floor. The GUI 300 includes one or more configuration controls to enable an operator to download games to gaming terminals 305 and/or execute other reconfigurations, for example. Using the GUI 300, an operator may select among available games and enable games on one or more gaming terminal 305 and/or banks 310 of gaming terminals 305. For example, an authorized user may select among games available under categories such as premium slots, hot slots, and traditional favorites, at game library 340. Using the menu bar 350, the GUI 300 allows a user to download or make available new games and/or provide additional credits to purchase/license games, for example. The GUI 300 may be used to configure and/or select one or more profiles for gaming floor layout and management, for example. Reports may also be generated for the gaming floor using the GUI 300. Tournament play may be configured and/or monitored using the GUI.
The GUI 300 may be used to manage one or more gaming environments and/or gaming floor layouts. The GUI 300 may be implemented in a variety of ways. Instead of and/or in addition to the embodiments described above, the GUI 300 may also be implemented in a menu-based format listing available games, gaming terminals, configuration options, reporting options, scheduling options, regulatory information, etc. For example, a table of gaming terminals may be displayed for an operator of a casino gaming floor. The table may display terminal name or ID, terminal status, current game, denomination, maximum lines, etc. Available game icons and/or names may also be provided.

A user may “click on” or otherwise select one or more gaming terminals and a game to download and/or provide at the selected terminal(s). A menu or set of options may then be presented to the operator to configure the game (e.g., max lines, denomination, etc.). In an embodiment, an email or other message may be sent to the operator after the game has been downloaded and/or provided to players at the gaming terminal(s).

Gaming terminals may be organized in one or more groups. A terminal may belong to one or more groups. Games may be downloaded and/or provided to one or more groups.

In certain embodiments, games may be downloaded to a gaming terminal in the background as someone is playing a game at the gaming terminal. At an appropriate time, the gaming terminal may then switch to the new game. The operator may set conditions for a switch or reconfiguration, and the system checks the conditions before switching/ reconfiguring the gaming terminal.

The GUI 300 may provide a scheduling engine allowing an operator to schedule a task. A task involves a collection of steps, such as download/make available to a terminal, download/make available to a group, run a report, notify user, notify group, etc. A schedule is a time or a repeating time to run the steps in the task. Multiple steps and/or multiple tasks may be executed in a schedule to automate reconfiguration and other actions.

In certain embodiments, the GUI 300 may also provide regulatory information. For example, the GUI 300 may provide a list or other display of executable code files on each component of the system and information about the executable files. Information may include name, build version, hash value, etc. A regulator may view game and machine information via the display. In certain embodiments, clicking on or otherwise selecting a gaming terminal provides the operator with current properties of the terminal, such as hash value, IP address, game, max lines, max bet, payout, value per coin, value per credit, download history, upcoming downloads, MAC address, machine status, machine ID, activation time, machine lock, etc. In certain embodiments, an operator may calculate a new hash value for an executable file at a gaming terminal via the GUI 300.

The GUI 300 may also provide an operator with reporting capability. For example, the system may generate an audit trail, download and/or other game play history, user access, user groups, machine listing, parameter listing, etc. An operator may also manage users and/or groups accessing the GUI 300 system. One or more users may be assigned to one or more groups, and permissions may be assigned to users and/or groups.

FIG. 4 depicts an example of a profile management interface 400 used in accordance with an embodiment of the present invention. The profile management interface 400 may be accessed from a menu or button in the GUI 300, for example. The interface 400 provides a list of profiles and allows an authorized user to add, remove and/or configure one or more profiles. A user may configure and save a profile to define a layout of games and/or other configuration information on a gaming floor. In an embodiment, the profile interface 400 provides default as well as customizable settings for one or more profiles. The interface 400 allows a user to assign an identifier to a profile and select a date and time for a floor profile configuration to begin. In an embodiment, the interface 400 allows a user to set a recurring time for implementation of a profile.

FIG. 5 shows a profile status list 500 used in accordance with an embodiment of the present invention. The profile status list 500 identifies available profiles and a schedule status for each of the profiles, as shown in FIG. 5.

FIG. 6 depicts a configuration options interface 600 used in accordance with an embodiment of the present invention. The interface 600 may be accessed from a menu option in the GUI 300, for example. The configuration interface 600 allows an authorized user to configure a game for a gaming floor. A user may configure a game denomination, a number of lines available for game play, a maximum number of credits to be bet, and/or a game variation percentage, for example. The interface 600 may allow an operator to check whether sufficient credits remain on a user’s account to allow a game to be enabled at one or more gaming terminals. In an embodiment, a banner message, such as “NEW” or other advertisement, may be highlighted on a gaming display, such as a primary or secondary display for a gaming terminal, using the interface 600.

In an embodiment, a gaming display, such as a top LCD display or “glass” and/or a bottom display or “glass” on a gaming terminal, may be dynamically modified or configured to display content, such as images and/or text. One or more displays may be configured to display a primary game, a secondary game, one or more pay tables, and/or text/graphic. For example, game art for a game downloaded to an electronic gaming machine may be downloaded to a top LCD display on that electronic gaming machine. Additionally, progressive jackpot information from a linked progressive controller may be displayed (and updated).

In an embodiment, one or more displays on a gaming terminal may be touchscreen displays. The touchscreen may be used to display help files or reference materials for perusal by a player, for example. The touchscreen may also be used to facilitate voting or feedback from players. In an embodiment, a touchscreen or traditional display may be used to implement networked and/or cooperative gaming. For example, a gaming terminal and display may allow players to compete against each other and track each other’s current winnings on the display. Additionally, a gaming machine and display may facilitate cooperative play wherein coin in or winnings for multiple players are pooled and displayed in an attempt to win a prize, for example.

An authorized operator may also configure preferences for the GUI 300 using a preferences interface 700, as illustrated in FIG. 7. The preferences interface 700 may be accessed using the GUI 300, for example. An operator may configure visual, deployment, notification, setup, and/or other preferences, for example, using the interface 700. For example, a user may configure what information is to be
displayed on the GUI 300 using the interface 700. A user may also configure how the information is displayed on the GUI 300.

[0124] FIG. 8 illustrates a credit management interface 800 used in accordance with an embodiment of the present invention. The credit management interface 800 may be accessed using the GUI 300, for example. As described above, an authorized user may download additional credits to an account to pay for games and/or services. The interface 800 allows an operator to view pricing options, credit balance, and other information. An operator may purchase additional credits for use with the GUI 300 or other system using the credit management interface 800. In an embodiment, an operator and/or gaming environment may apply one or more coupons from a gaming supplier, machine supplier, and/or other vendor for free and/or discount credits. FIG. 9 illustrates an example of a coupon redemption.

[0125] FIG. 10 depicts a tournament setup interface 1000 used in accordance with an embodiment of the present invention. The tournament setup interface 1000 may be accessed using the GUI 300, for example. As described above, an operator may configure tournament play using the system 100. The tournament interface 1000 and the GUI 300 allow an operator to configure tournament parameters such as name, time, starting credits, and/or other parameters.

[0126] In conjunction with configuration of a tournament, tournament scheduling may be determined using an interface, such as tournament scheduling interface 1100, illustrated in FIG. 11. The tournament scheduling interface 1100 allows a tournament to start as soon as possible (e.g., after currently-executing non-tournament games on participating gaming terminals have been completed) and/or at a certain scheduled time. The interface 1100 may also allow an operator to schedule an ending time for a tournament.

[0127] Additionally, as shown in FIG. 12, the GUI 300 may present an operator with tournament setup options, such as a game selected for tournament play and assignment of players to gaming machines (e.g., provide specific assignments of players to gaming machines or allow players to use any gaming machine configured for the tournament). Using a tournament options interface 1200, an operator may configure a variety of options for game play of the tournament. If players are assigned to specific machines, an interface, such as the machine assignment interface 1300 shown in FIG. 13 or other textual or graphical form, may be provided to allow an operator to assign players to participating gaming machines. Alternatively, an operator may highlight gaming terminal icons via the GUI 300 to assign participating players to terminals. After a tournament has been configured, a summary 1400 may be generated as shown in FIG. 14. The summary 1400 may be displayed for the operator and/or for the players participating in the tournament, for example. In an embodiment, tournament summary information and/or instructional information may be displayed on an overhead display in a casino or other gaming environment.

[0128] In operation, the GUI 300 may be used to manage certain aspects of a gaming floor, such as a casino floor. The GUI 300 may be used to control eligible gaming terminals and view table games and both eligible and non-eligible gaming terminals on the gaming floor. In an embodiment, only eligible gaming terminals (e.g., configurable electronic gaming machines) may be displayed on the GUI 300. Eligible gaming terminals are capable of receiving downloadable products or electronic configuration information, for example.

[0129] The GUI 300 provides a graphical map of a gaming floor and provides tools for an operator to maximize floor potential by moving content around the floor. The GUI 300 may provide a real-time, historical, and/or time-averaged view of the floor, for example. Tools available via the GUI 300 allow an operator to deliver content and analyze performance. An example of a graph charting gaming machine performance is shown in FIG. 15. An operator may track trends, aggregate data, and perform additional analysis using the tools of the GUI 300. Preferences available in the GUI 300 allow a user to configure view, data, analysis, etc. In an embodiment, data obtained via the GUI 300 may be transmitted to an accounting system for analysis. The GUI 300 may enable a user to reconfigure gaming terminals 305, enable or disable gaming terminals 305, and/or lock gaming terminals 305 to prevent reconfiguration or download, for example.

[0130] Indicators 320, 321 may be associated with each gaming terminal 305 on the GUI 300. In an embodiment, the indicator 320 represents a denomination of the gaming terminal 305 (e.g., a darker indicator signals a higher denomination). In an embodiment, the indicator 321 represents a status of the gaming terminal 305 (e.g., non-play, carded play, non-carded play, tournament play, etc.). Indicator bands 322 are shown surrounding each bank 310 of gaming terminals 305 on the GUI 300. The indicator bands 322 indicate performance of the bank 310 (e.g., red for bad, green for good, and/or shades of red/green).

[0131] An authorized user may view the game library 340 to peruse a list of available games and configure options for each game (lines, denomination, etc.). Games may be grouped into collections, such as premium slots, traditional favorites, and hot slots. An operator may select one or more gaming terminals 305 or banks 310 of gaming terminals 305 using a keyboard and/or pointing device (e.g., mouse, trackball, touchpad, touch screen, stylus, etc.). The operator may then select one or more games from the library 340 and configure or provide (e.g., in a server based environment) the selected terminal(s) 305 and/or bank(s) 310 for the selected game(s). The software and/or hardware of the gaming terminal(s) 305 is made available for the game(s). In an embodiment, the software and/or hardware of a gaming terminal 305 may emulate different chipsets based on content for display at the gaming terminal 305.

[0132] In an embodiment, the GUI 300 generates a message or alert if a game is incompatible with a gaming terminal 305. The GUI 300 may prevent an incompatible download or may disable the game on the gaming terminal 305 until the incompatibility is resolved. The GUI 300 may also generate status messages to information an operator of a success, failure, and/or other status of a download attempt, for example. The GUI 300 may also display other indicators to apprise an operator of errors or status updates.

[0133] In an embodiment, the GUI 300 may also allow the operator to check for additional games made available for download. Alternatively, the GUI 300 may automatically check for game and/or system updates and alert the operator. The GUI 300 may connect to an external server or database to retrieve a game list. The operator may access and download games on the list. An operator may add games from the list to the game library 340. In an embodiment, the operator may preview games prior to providing game(s) to the library 340.
In an embodiment, the GUI 300 may contact a plurality of servers, media and/or databases to provide games from different sources. In an embodiment, the GUI 300 may only display games approved for a relevant jurisdiction. The GUI 300 may perform a checksum or other error checking to verify that an approved product has been downloaded to the library. [0134] For example, FIG. 16 illustrates a new game query interface 1600 used in accordance with an embodiment of the present invention. The interface 1600 may be used by an operator to search for new games made available for download or server based play. New game query interface 1600 allows a user to search for new games based on one or more criteria. For example, a user may search based on date, manufacturer (e.g., Aristocrat Technologies, Inc., etc.), denomination (e.g., penny games, quarter games, dollar games, multi-denominal games, etc.), number of lines (e.g., 3 line games, 5 line games, 20 line games, etc.) and/or other criteria. The interface 1600 may allow a user to preview games identified by a search as well as review information regarding the game(s). A user may add game(s) to a game library for the gaming environment using the interface 1600.

[0135] The GUI 300 may display available licensing credits for a property, operator and/or customer, for example. When a game is applied to one or more gaming terminals 305, the GUI 300 displays an associated cost and deducts the cost from the credit balance. If a customer wishes to download a game but lacks sufficient credits, the customer may order additional licensing credits directly online or via telephone, as described above. The GUI 300 may provide a rate schedule per credit, which may differ per customer. A customer inputs a desired number of credits, an account is charged, and credits are bought. In an embodiment, a customer may input a coupon code for a discount or free credit purchase in general or for specific game(s). Coupons may have an expiration date. The customer may then proceed to download game(s) or other software.

[0136] In an embodiment, an operator may switch among a number of licensed games for play at the gaming terminals 305. In an embodiment, licensing may be associated with play of the game. For example, licensing credits may be consumed as a game is played. Thus, a frequently played game results in greater licensing cost, while an infrequently played game results in little licensing cost.

[0137] In an embodiment, other software and/or firmware updates may be distributed to gaming terminals 305 via the GUI 300. Updates for processing software, accounting or management software, and other utilities may be provided to gaming terminals 305 or other electronic systems. Software may be downloaded for execution at a gaming environment or may be delivered via an application service provider model. In an embodiment, customers may be billed based on usage or a flat fee, for example.

[0138] In an embodiment, deployment of a game and/or other reconfiguration of a gaming terminal 305 may be implemented substantially in real-time and/or may be scheduled. Configuration may be scheduled for gaming terminal 305 idle time or following a certain interval (e.g., 5 minutes) of gaming terminal 305 idle time, for example. Configuration may also be scheduled for a particular date and time, for example. In an embodiment, a recurring download schedule may be established. For example, a first game may be scheduled for download to a gaming terminal 305 for play during weekdays, and a second game may be scheduled for download to the gaming terminal 305 for play during weekends.

[0139] As described above, the GUI 300 may facilitate tournament play on a gaming floor (or multiple gaming floors). In an embodiment, special tournament versions of a game with a higher return to player (RTP) may be downloaded to participating gaming terminals 305 for tournament play. An operator may be able to select from available tournament versions of games. Players may be assigned to particular gaming terminals 305 or may check in using a player card. An overhead display and/or gaming terminal display may show information such as a leader board, time remaining, player identification, tournament mode, celebration mode, etc. After a tournament is complete, the participating gaming terminals 305 may be configured to exit tournament mode and resume regular operation.

[0140] A display associated or integrated with the gaming terminal 305 displays the primary game features for play of a game. For example, the display may generate a conventional slot game in which a plurality of symbols are moved within their respective columns, as if rotated, at the appropriate time in response to the user activation of the gaming terminal. The gaming terminal 305 and/or bank 310 may also include a secondary or other additional display. The additional display may display player information, secondary game information, supplemental information, promotional information, etc. The GUI 300 may allow configuration of the primary and secondary displays based on the game and configuration at the gaming terminal 305 and/or bank 310. For example, the primary display showing the game available for play changes when a game is downloaded to the gaming terminal 305. The secondary display advertising the game also changes when a game is downloaded to the gaming terminal 305.

[0141] The GUI 300 may allow a user to select one or more items displayed on the GUI 300 using a pointing device, for example. A user may select items or groups of items for modification and/or information retrieval. The GUI 300 provides a menu/tool bar and may provide context-sensitive menus for a particular profile, property, category, etc. A user may select a profile and/or property to configure using the GUI 300. A user may manage multiple profiles and/or properties using the GUI 300. The GUI 300 may allow “smart” selection according to a criterion (e.g., all gaming terminals of a certain type, all gaming terminals of a certain denomination, all gaming terminals in a certain bank, etc.). Additionally, the GUI 300 may allow a user to select all inactive games, specify multiple criteria for selection, select all gaming terminals having the same configuration, all games performing poorly or well, etc. In an embodiment, an operator may click on, highlight, or position a cursor over an item, such as a gaming terminal 305 or game in the library 340, on the GUI 300 to retrieve information, such as name, licensing, regulatory notices, performance, etc., regarding the item.

[0142] The GUI 300 may also provide an edit layout mode. In edit layout mode, a tool bar allows an operator to draw architectural elements on the graphical map of the floor in the GUI 300. An operator may also add textural or graphical annotations to the map, import graphics, move objects, etc. Thus, the GUI 300 provides an improved tool to generate and change a floor map for a gaming environment.

[0143] In an embodiment, the configurator system 100 detects an addition of a gaming terminal 305 to the system network. The system 100 may inform an operator through the GUI 300 (e.g., a pop-up box, icon or message) or other alert. Then operator may position a gaming terminal icon on the floor map or the GUI 300 may automatically generate an icon
in position on the floor map. The configurator 100 may provide game information, denomination information, and other configuration information to the GUI 300. The operator may configure the new gaming terminal using the GUI 300. In an embodiment, an icon or image displayed on GUI 300 representing a gaming terminal or other device may be selected by an operator, such as by using a mouse or other pointing device. A menu may appear via GUI 300 to allow an operator to select from a variety of options available for the gaming terminal or other device. Similarly, an operator may select a group or a plurality of gaming terminals and/or other devices for configuration and/or information retrieval. Additionally, the system 100 may detect a removal of a gaming terminal from the network and inform the GUI 300 and/or an operator to delete the gaming terminal from the GUI 300 map.

[0144] In an embodiment, the GUI 300 facilitates creation of one or more profiles. In profile mode, the GUI 300 allows a user to layout a floor, save the layout, and schedule the layout to occur at a certain date and time (and/or a recurring layout). A profile allows an operator to reconfigure an entire floor or section of a floor. In an embodiment, an operator may select a profile from a menu to implement as soon as possible or based on a schedule. In an embodiment, the GUI 300 allows an operator to manage multiple properties and multiple floors within a property using one interface. For example, a company may manage all of its casino floors using one interface and one pool of licensing credits.

[0145] Certain embodiments described above may operate in conjunction with one or more multi-site and/or local progressive games. One or more multi-site and/or local progressive games may be configured as described above in one or more gaming environments, for example. One or more multi-site and/or local progressive games may be downloaded and/or selected for play by one or more players in one or more gaming environments, for example.

[0146] Multi-site and local progressive games provide for jackpots to grow. In certain embodiments, a player may select a game to participate in a progressive via a downloadable and/or server-based gaming system. For example, a downloadable and/or server-based gaming environment, a player may download and/or otherwise play a game that is configured and connected to a progressive link.

[0147] In certain embodiments, a player may request available progressives. A display identifies available progressive(s) and the game(s) that a player can select to download and/or play to participate in the progressive(s), for example. A selected game is configured to integrate with the progressive (e.g., a Hyperlink® progressive, symbol-based progressive, etc.). A contribution to a progressive jackpot pool (or pools) associated with the progressive is taken from the downloaded/server-based game.

[0148] FIG. 20 illustrates a flow diagram for a method 2000 for progressive game play in a downloadable and/or server-based gaming environment in accordance with an embodiment of the present invention. At step 2010, progressive link option(s) and associated game(s) are displayed to a player via a downloadable and/or server-based gaming system. For example, a gaming terminal display and/or other associated display may provide a graphical and/or textual listing of available progressive link(s) and game(s) that may be played to win the progressive jackpot(s). A progressive may be a local (e.g., single-site) progressive and/or a multi-site (e.g., multiple casinos involved) progressive, for example.

[0149] At step 2020, a player selects a progressive and an associated game for play. The player may be allowed to select a progressive and then select from among a plurality of games to play for that progressive. Alternatively and/or in addition, the player may select a progressive, and a game associated with that progressive is automatically chosen as well. The selected progressive is then downloaded and/or provided via server for play at a gaming device by the player.

[0150] At step 2030, a progressive contribution is made to the selected progressive prize pool based on a wager made by the player and/or other criteria for the progressive. For example, a certain percentage of a player’s wager is added to the progressive prize pool for the award of the progressive jackpot. As another example, a certain increase is made to the progressive prize pool each time a wager is made for a progressive game.

[0151] At step 2040, the progressive game is played by the player. That is, the game being played for the progressive prize is actuated by the player (e.g., by making a wager, by handle pull, by button push, etc.). A result of the game determines or helps to determine whether a progressive prize has been won. If a prize has been won, at step 2050, the prize is awarded. For a multi-site or wide area progressive, a prize may be awarded to one or more players at one or more of a plurality of participating gaming locations, for example.

[0152] In certain embodiments described above, eligible player(s) can access tournament game(s) and/or join tournament(s) before appointed times via a downloadable and/or server-based gaming system. Tournament play may be requested and scheduled for future participation via a downloadable/server-based system, for example. Players may be assigned to and/or request particular gaming terminals or may check in at any terminal using a player card, for example.

[0153] In an embodiment, a tournament version of a game may be downloaded and/or made available (e.g., via a server or remote computing system) to participating gaming terminals for tournament play. After a tournament is complete, the participating gaming terminals may be configured to exit tournament mode and resume regular operation (e.g., return to executing a regular play version of the game rather than the tournament version).

[0154] In certain embodiments, tournament play may be based on a certain number of credits made available at a gaming machine in response to a tournament “buy in” or registration fee. Alternatively, tournament play may be facilitated on a per-wager basis by the player, for example. Tournament play may be configured to last for a particular period of time before regular play resumes. Participating gaming terminals are then placed in a “tournament mode”. At the end of the period, one or more criteria, such as a net win of each participating terminal, is used to measure the contestent’s performance. One or more top scorers may be award one or more prizes, for example.

[0155] In certain embodiments, tournament standings are broadcast (or multi-cast) to gaming terminal(s) and/or player tracking module(s) for display during progress of a tournament. An overhead display and/or gaming terminal display, for example, may show information such as a leader board, time remaining, player identification, tournament mode, celebration mode, etc. Additionally, one or more displays on participating gaming terminals may display information and/or graphics related to tournament play. Tournament information may include information such as tournament leaders and the points standings, player standing with respect to the
leaders (such as place in the tournament, points, and/or a number of points separating the player from the closest competition), time remaining in the tournament and/or other information. At the conclusion of the tournament, the secondary display may show tournament winner(s), prize(s) won, and/or other information, for example. [0156] FIG. 21 illustrates a flow diagram for a method 2100 for tournament play in a downloadable and/or server-based gaming environment in accordance with an embodiment of the present invention. At step 2110, a tournament is selected in a downloadable/server-based gaming environment. For example, a gaming terminal and/or other gaming device may present one or more eligible players (where eligibility may be determined based on player card/membership, gaming terminal, game play, player rank, time/dates, and the like) with one or more available tournament games for selection by the player(s). Player(s) may then select a tournament from the displayed interface for play.

[0157] At step 2120, a gaming terminal is configured for tournament play. For example, a tournament game is downloaded and/or made available for play (e.g., via a server, external memory, and/or remote computing system) at a participating gaming terminal. Alternatively and/or in addition, an existing game may be configured and/or modified for tournament play at a gaming terminal. In certain embodiments, a game is not modified for tournament play, but, rather, game outcomes are specially recorded for determination and award of one or more tournament prizes, for example. [0158] At step 2130, a tournament game is played. The game is played by one or more players at one or more locations and results are compiled, for example. Game and/or results may be displayed at participating gaming devices, via separate overhead displays, via websites, etc. At step 2140, one or more tournament prizes are awarded. One or more prizes are awarded to one or more players based on one or more criteria, such as game outcome, frequency of play, coin in vs. coin out, winning percentage, etc.

[0159] Thus, certain embodiments provide an improved system and method for configuration of gaming terminals in a gaming environment. Certain embodiments provide a system and method that allow customization and dynamic modification by an operator. Certain embodiments provide improved reconfiguration of gaming terminals in gaming environment to offer a variety of games and/or other options to players. Additionally, certain embodiments improve security, regulation, and reliability of gaming terminals and access to games by players. Certain embodiments monitor game play, player response, and configuration changes to affect configuration of a gaming environment. Certain embodiments provide an improved player experience through selectable games, feedback, and/or other preferences, for example. Certain embodiments allow progressive, mystery, bonusing and other gaming content to be added to gaming terminals. Certain embodiments allow an operator to manage sign or display content and configuration, as well as gaming terminal software and firmware content and configuration. Thus, certain embodiments allow adaptable control and configuration of a gaming environment.

[0160] While the invention has been described with reference to one or more preferred embodiments, those skilled in the art will understand that changes may be made and equivalents may be substituted without departing from the scope of the invention. In addition, many modifications may be made to adapt a particular step, structure, or material to the teachings of the invention without departing from its scope. Therefore, it is intended that the invention not be limited to the particular embodiment disclosed, but that the invention will include all embodiments falling within the scope of the appended claims.

1. A method for providing suggestions to players in a downloadable or server-based gaming environment, said method comprising:
   - monitoring game play, via server, by at least one of one or more players at one or more gaming devices;
   - analyzing game play data generated from said monitoring step to identify at least one of a pattern of play and a popularity of play; and
   - providing a game play recommendation, based on said at least one of a pattern of play and a popularity of play, to at least one of said one or more players for play in the downloadable or server-based gaming environment.

2. The method of claim 1, further comprising reconfiguring at least one of said one or more gaming devices according to said game play recommendation.

3. The method of claim 1, wherein said monitoring step further comprises monitoring one or more of game selection, frequency of play, consistency of play, most recent play, coin in, and/or coin out.

4. The method of claim 1, wherein said monitoring step further comprises monitoring game play, via server, by carded players at gaming devices in a predetermined gaming area.

5. The method of claim 1, further comprising providing a game play recommendation to one or more players not included in said one or more monitored players.

6. The method of claim 1, wherein said game play recommendation comprises a game play trial offered to at least one of said one or more players.

7. The method of claim 1, wherein said providing step further comprises providing a game play recommendation, based on player preference and said at least one of a pattern of play and a popularity of play, to at least one of said one or more players for play in the downloadable or server-based gaming environment.

8. The method of claim 1, further comprising automatically activating said game play recommendation at least one of said one or more gaming devices.

9. A method for progressive play in a downloadable or server-based gaming environment, said method comprising:
   - displaying, at a gaming device, one or more progressives and associated games available for play via a gaming server;
   - allowing a player to select from said one or more progressives to participate in said associated game via said gaming server; and
   - activating said associated game for play with said selected progressive via said gaming server.

10. The method of claim 9, wherein said activating step further comprises activating a selected game for play with a progressive by downloading said selected game from said gaming server to said gaming device.

11. The method of claim 9, wherein said one or more progressive includes one or more single-site progressives and multiple-site progressives.

12. The method of claim 9, wherein said allowing step allows the player to select a progressive from said one or more progressives and then selecting from among a plurality of games to play for the selected progressive.
13. A method for tournament selection and play in a downloadable or server-based gaming environment, said method comprising:

- displaying available tournament games at a plurality of gaming devices via a gaming server;
- facilitating selection of a tournament game from said available tournament games;
- configuring, via said gaming server, said plurality of gaming devices for tournament play with said selected tournament game;
- activating said selected tournament game at a gaming terminal; and
- executing play of said selected tournament game.

14. The method of claim 13, wherein said configuring step further comprises configuring a game running on said plurality of gaming devices for tournament play.

15. The method of claim 13, further comprising the steps of:

- awarding a prize from said selected tournament game; and
- reconfiguring said plurality of gaming devices to resume normal game play following conclusion of said selected tournament game.

16. The method of claim 15, wherein said selected tournament game concludes following a predetermined period of time.

17. The method of claim 13, wherein said selected tournament game is requested and scheduled for future participation.

18. The method of claim 13, wherein said selected tournament game is downloaded to said plurality of gaming devices from said gaming server.

19. The method of claim 13, wherein said selected tournament game is executed at said plurality of gaming devices via said gaming server.

20. A system providing game content in a downloadable or server-based gaming environment, said system comprising:

- a plurality of gaming devices providing game play to a plurality of players;
- a gaming server including a plurality of games available for play at said plurality of gaming devices based on user selection, said gaming server including a configuration manager for configuring and managing said plurality of games for play at said plurality of gaming devices; and
- a graphical user interface allowing a user to configure said plurality of games at said gaming server.

said configuration manager providing two or more of the following games for configuration of said plurality of gaming devices based on user selection:

- one or more games available for gaming trial on one or more of said plurality of gaming devices for a predetermined time period, wherein said configuration manager collects game play data from the gaming trial for analysis;
- one or more recommended games for play on one or more of said plurality of gaming devices based on monitored data identifying at least one of a pattern of play and a popularity of play of games from at least one of said plurality of gaming devices and a plurality of monitored players;
- one or more progressive prizes and one or more associated games to be played one or more of said plurality of gaming devices for said one or more progressive prizes, said configuration manager facilitating selection of a progressive prize for which to play and selection of an associated game to be played for a chance to win said progressive prize; and
- one or more tournament games available for tournament play at said plurality of gaming devices, wherein said configuration manager configures said plurality of gaming devices for tournament play for a predetermined time period upon selection of said one of said plurality of gaming devices.

21. The system of claim 20, wherein said user comprises a casino operator.

22. The system of claim 20, wherein said user comprises a player at one of said plurality of gaming devices.

23. The system of claim 20, wherein said configuration manager provides one or more games for play at said plurality of gaming devices via downloading of said one or more games from said gaming server to said plurality of gaming devices.

24. The system of claim 20, wherein said configuration manager provides one or more games for play at said plurality of gaming devices via server-based execution of said one or more games from said gaming server to said plurality of gaming devices.

25. The system of claim 20, wherein said configuration manager reconfigures artwork and displays said plurality of gaming machines based on a game selected by said user for play at said plurality of gaming machines.

26. The system of claim 20, wherein said plurality of players at said plurality of gaming machines comprise players having player cards that are carded in at said plurality of gaming machines.