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## Proximity-based network registration


### Abstract

Shared hoteling workspaces and computer equipment are preconfigured based on location. A location associated with a mobile device is monitored. As the mobile device moves toward a workspace, computer equipment associated with the workspace are automatically preconfigured for use. Different configuration events and operational states may be implemented, based on a locational proximity of the mobile device to the workspace. When the mobile device arrives at the workspace, the mobile device has been automatically paired/registered with the computer equipment at the workspace. Moreover, when the location of the mobile device no longer matches the workspace, the network pairings/registrations may be automatically torn down and deleted, thus making the workspace available for a next occupant.



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## Background/Summary

FIELD OF THE DISCLOSURE

(1) This disclosure generally relates to information handling systems, and more particularly relates to personalized configuration and network registration of shared computer peripherals based on a user's location.

BACKGROUND

(2) As the value and use of information continues to increase, individuals and businesses seek additional ways to process and store information. One option is an information handling system. An information handling system generally processes, compiles, stores, and/or communicates

information or data for business, personal, or other purposes. Because technology and information handling needs and requirements may vary between different applications, information handling systems may also vary regarding what information is handled, how the information is handled, how much information is processed, stored, or communicated, and how quickly and efficiently the information may be processed, stored, or communicated. The variations in information handling systems allow for information handling systems to be general or configured for a specific user or specific use such as financial transaction processing, reservations, enterprise data storage, or global communications. In addition, information handling systems may include a variety of hardware and software resources that may be configured to process, store, and communicate information and may include one or more computer systems, data storage systems, and networking systems.

SUMMARY

(3) Shared workspaces and computer equipment are preconfigured based on location. In today's work from home environment, employees infrequently visit office buildings. Cubicles, desks, and their accompanying computer equipment are thus shared by different employees in a hoteling arrangement. Should an employee reserve a workspace, a location of the employee's personal device (such as a smartphone or laptop computer) is monitored. As the employee enters the building and walks to the reserved workspace, the computer equipment is automatically preconfigured for use with the employee's personal device. Different configuration events and operational states may be implemented, based on a locational proximity of the employee's personal device to the workspace. When the employee arrives at the cubicle, desk, or other workspace, the employee's smartphone and laptop computer are paired/registered with WI-FI®, BLUETOOTH®, and other wireless networks serving the workspace. The employee may thus immediately and productively use the computer equipment, without manual configurations that consume precious reserved time. Moreover, when the location of the personal device no longer matches the workspace, the employee may be assumed to have vacated the workspace. The network pairings/registrations may thus be automatically torn down and deleted, thus making the workspace available for another employee.

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## Description

BRIEF DESCRIPTION OF THE DRAWINGS

(1) It will be appreciated that for simplicity and clarity of illustration, elements illustrated in the Figures have not necessarily been drawn to scale. For example, the dimensions of some of the elements are exaggerated relative to other elements. Embodiments incorporating teachings of the present disclosure are shown and described with respect to the drawings presented herein, in which:

(2) FIG. **1** is a block diagram of a generalized information handling system;

(3) FIGS. **2-3** illustrate a workspace-sharing environment, according to exemplary embodiments;

(4) FIG. **4** illustrates proximity-based configuration, according to exemplary embodiments;

(5) FIG. **5** is a block diagram illustrating a service architecture, according to exemplary embodiments;

(6) FIGS. **6-8** illustrate a hybrid work state machine and its algorithmic flowgraphs, according to exemplary embodiments; and

(7) FIG. **9** is a flowchart or algorithm illustrating a method or process for software-based locational network pairing, according to exemplary embodiments.

(8) The use of the same reference symbols in different drawings indicates similar or identical items.

DETAILED DESCRIPTION OF DRAWINGS

(9) The following description in combination with the Figures is provided to assist in understanding the teachings disclosed herein. The following discussion will focus on specific implementations and embodiments of the teachings. This focus is provided to assist in describing the teachings, and

should not be interpreted as a limitation on the scope or applicability of the teachings.

(10) FIG. **1** illustrates an embodiment of an information handling system **100** including processors **102** and **104**, chipset **110**, memory **120**, graphics adapter **130** connected to video display **134**, non-volatile RAM (NV-RAM) **140** that includes a basic input and output system/extensible firmware interface (BIOS/EFI) module **142**, disk controller **150**, hard disk drive (HDD) **154**, optical disk drive (ODD) **156**, disk emulator **160** connected to solid state drive (SSD) **164**, an input/output (I/O) interface **170** connected to an add-on resource **174**, and a network interface device **180**. Processor **102** is connected to chipset **110** via processor interface **106**, and processor **104** is connected to chipset **110** via processor interface **108**.

(11) Chipset **110** represents an integrated circuit or group of integrated circuits that manages data flow between processors **102** and **104** and the other elements of information handling system **100**. In a particular embodiment, chipset **110** represents a pair of integrated circuits, such as a north bridge component and a south bridge component. In another embodiment, some or all of the functions and features of chipset **110** are integrated with one or more of processors **102** and **104**. Memory **120** is connected to chipset **110** via a memory interface **122**. An example of memory interface **122** includes a Double Data Rate (DDR) memory channel, and memory **120** represents one or more DDR Dual In-Line Memory Modules (DIMMs). In a particular embodiment, memory interface **122** represents two or more DDR channels. In another embodiment, one or more of processors **102** and **104** include memory interface **122** that provides a dedicated memory for the processors. A DDR channel and the connected DDR DIMMs can be in accordance with a particular DDR standard, such as a DDR3 standard, a DDR4 standard, a DDR5 standard, or the like. Memory **120** may further represent various combinations of memory types, such as Dynamic Random Access Memory (DRAM) DIMMs, Static Random Access Memory (SRAM) DIMMs, non-volatile DIMMs (NV-DIMMs), storage class memory devices, Read-Only Memory (ROM) devices, or the like.

(12) Graphics adapter **130** is connected to chipset **110** via a graphics interface **132**, and provides a video display output **136** to a video display **134**. An example of a graphics interface **132** includes a peripheral component interconnect-express interface (PCIe) and graphics adapter **130** can include a four lane (×4) PCIe adapter, an eight lane (×8) PCIe adapter, a 16-lane (×16) PCIe adapter, or another configuration, as needed or desired. In a particular embodiment, graphics adapter **130** is provided on a system printed circuit board (PCB). Video display output **136** can include a digital video interface (DVI), a high definition multimedia interface (HDMI), DisplayPort interface, or the like. Video display **134** can include a monitor, a smart television, an embedded display such as a laptop computer display, or the like.

(13) NV-RAM **140**, disk controller **150**, and I/O interface **170** are connected to chipset **110** via I/O channel **112**. An example of I/O channel **112** includes one or more point-to-point PCIe links between chipset **110** and each of NV-RAM **140**, disk controller **150**, and I/O interface **170**. Chipset **110** can also include one or more other I/O interfaces, including an Industry Standard Architecture (ISA) interface, a Small Computer Serial Interface (SCSI) interface, an Inter-Integrated Circuit (I.sup.2C) interface, a System Packet Interface (SPI), a Universal Serial Bus (USB), another interface, or a combination thereof. NV-RAM **140** includes BIOS/EFI module **142** that stores machine-executable code (BIOS/EFI code) that operates to detect the resources of information handling system **100**, to provide drivers for the resources, to initialize the resources, and to provide common access mechanisms for the resources. The functions and features of BIOS/EFI module **142** will be further described below.

(14) Disk controller **150** includes a disk interface **152** that connects the disc controller **150** to HDD **154**, to ODD **156**, and to disk emulator **160**. Disk interface **152** may include an integrated drive electronics (IDE) interface, an advanced technology attachment (ATA) such as a parallel ATA (PATA) interface or a serial ATA (SATA) interface, a SCSI interface, a USB interface, a proprietary interface, or a combination thereof. Disk emulator **160** permits a solid-state drive (SSD) **164** to be

connected to information handling system **100** via an external interface **162**. An example of external interface **162** includes a USB interface, an IEEE 1394 (Firewire) interface, a proprietary interface, or a combination thereof. Alternatively, SSD **164** can be disposed within information handling system **100**.
(15) I/O interface **170** includes a peripheral interface **172** that connects I/O interface **170** to add-on resource **174**, to TPM **176**, and to network interface device **180**. Peripheral interface **172** can be the same type of interface as I/O channel **112**, or can be a different type of interface. As such, I/O interface **170** extends the capacity of I/O channel **112** when peripheral interface **172** and the I/O channel are of the same type, and the I/O interface translates information from a format suitable to the I/O channel to a format suitable to the peripheral channel **172** when they are of a different type. Add-on resource **174** can include a sound card, data storage system, an additional graphics interface, another add-on resource, or a combination thereof. Add-on resource **174** can be on a main circuit board, a separate circuit board or an add-in card disposed within information handling system **100**, a device that is external to the information handling system, or a combination thereof.
(16) Network interface device **180** represents a network communication device disposed within information handling system **100**, on a main circuit board of the information handling system, integrated onto another element such as chipset **110**, in another suitable location, or a combination thereof. Network interface device **180** includes a network channel **182** that provides an interface to devices that are external to information handling system **100**. In a particular embodiment, network channel is of a different type than peripheral channel **172** and network interface device **180** translates information from a format suitable to the peripheral channel to a format suitable to external devices. In a particular embodiment, network interface device **180** includes a host bus adapter (HBA), a host channel adapter, a network interface card (NIC), or other hardware circuit that can connect the information handling system to a network. An example of network channel **182** includes an InfiniBand channel, a fiber channel, a gigabit Ethernet channel, a proprietary channel architecture, or a combination thereof. Network channel **182** can be connected to an external network resource (not illustrated). The network resource can include another information handling system, a data storage system, another network, a grid management system, another suitable resource, or a combination thereof.
(17) The information handling system **100** may include a baseboard management controller (BMC). The BMC is connected to multiple elements of information handling system **100** via one or more management interface to provide out of band monitoring, maintenance, and control of the elements of the information handling system. As such, BMC represents a processing device different from processors **102** and **104**, which provides various management functions for information handling system **100**. In an embodiment, BMC may be responsible for granting access to a remote management system that may establish control of the elements to implement power management, cooling management, storage management, and the like. The BMC may also grant access to an external device. In this case, the BMC may include transceiver circuitry to establish wireless communications with the external device such as a mobile device. The transceiver circuitry may operate on a Wi-Fi channel, a near-field communication (NFC) channel, a Bluetooth or Bluetooth-Low-Energy (BLE) channel, a cellular based interface such as a global system for mobile (GSM) interface, a code-division multiple access (CDMA) interface, a universal mobile telecommunications system (UMTS) interface, a long-term evolution (LTE) interface, another cellular based interface, or a combination thereof. A mobile device may include Ultrabook, a tablet computer, a netbook, a notebook computer, a laptop computer, mobile telephone, a cellular telephone, a smartphone, a personal digital assistant, a multimedia playback device, a digital music player, a digital video player, a navigational device, a digital camera, and the like.
(18) The term BMC may be used in the context of server systems, while in a consumer-level device a BMC may be referred to as an embedded controller (EC). A BMC included at a data storage system can be referred to as a storage enclosure processor. A BMC included at a chassis of a blade

server can be referred to as a chassis management controller, and embedded controllers included at the blades of the blade server can be referred to as blade management controllers. Out-of-band communication interfaces between BMC and elements of the information handling system may be provided by management interface that may include an inter-integrated circuit (I2C) bus, a system management bus (SMBUS), a power management bus (PMBUS), a low pin count (LPC) interface, a serial bus such as a universal serial bus (USB) or a serial peripheral interface (SPI), a network interface such as an Ethernet interface, a high-speed serial data link such as PCIe interface, a network controller-sideband interface (NC-SI), or the like. As used herein, out-of-band access refers to operations performed apart from a BIOS/operating system execution environment on information handling system **100**, that is apart from the execution of code by processors **102** and **104** and procedures that are implemented on the information handling system in response to the executed code.

(19) In an embodiment, the BMC implements an integrated remote access controller (iDRAC) that operates to monitor and maintain system firmware, such as code stored in BIOS/EFI module **142**, option ROMs for graphics interface **130**, disk controller **150**, add-on resource **174**, network interface **180**, or other elements of information handling system **100**, as needed or desired. In particular, BMC includes a network interface that can be connected to a remote management system to receive firmware updates, as needed or desired. Here BMC receives the firmware updates, stores the updates to a data storage device associated with the BMC, transfers the firmware updates to NV-RAM of the device or system that is the subject of the firmware update, thereby replacing the currently operating firmware associated with the device or system, and reboots information handling system, whereupon the device or system utilizes the updated firmware image.

(20) BMC utilizes various protocols and application programming interfaces (APIs) to direct and control the processes for monitoring and maintaining the system firmware. An example of a protocol or API for monitoring and maintaining the system firmware includes a graphical user interface (GUI) associated with BMC, an interface defined by the Distributed Management Taskforce (DMTF) (such as Web Services Management (WS-MAN) interface, a Management Component Transport Protocol (MCTP) or, Redfish interface), various vendor defined interfaces (such as Dell EMC Remote Access Controller Administrator (RACADM) utility, Dell EMC Open Manage Server Administrator (OMSS) utility, Dell EMC Open Manage Storage Services (OMSS) utility, Dell EMC Open Manage Deployment Toolkit (DTK) suite), representational state transfer (REST) web API, a BIOS setup utility such as invoked by a “F2” boot option, or another protocol or API, as needed or desired.

(21) In a particular embodiment, BMC is included on a main circuit board (such as a baseboard, a motherboard, or any combination thereof) of information handling system **100**, or is integrated into another element of the information handling system such as chipset **110**, or another suitable element, as needed or desired. As such, BMC can be part of an integrated circuit or a chip set within information handling system **100**. BMC may operate on a separate power plane from other resources in information handling system **100**. Thus BMC can communicate with the remote management system via network interface or the BMC can communicate with the external mobile device using its own transceiver circuitry while the resources or elements of information handling system **100** are powered off or at least in low power mode. Here, information can be sent from the remote management system or external mobile device to BMC and the information can be stored in a RAM or NV-RAM associated with the BMC. Information stored in the RAM may be lost after power-down of the power plane for BMC, while information stored in the NV-RAM may be saved through a power-down/power-up cycle of the power plane for the BMC.

(22) In a typical usage case, information handling system **100** represents an enterprise class processing system, such as may be found in a datacenter or other compute-intense processing environment. Here, there may be hundreds or thousands of other enterprise class processing

systems in the datacenter. In such an environment, the information handling system may represent one of a wide variety of different types of equipment that perform the main processing tasks of the datacenter, such as modular blade servers, switching and routing equipment (network routers, top-of-rack switches, and the like), data storage equipment (storage servers, network attached storage, storage area networks, and the like), or other computing equipment that the datacenter uses to perform the processing tasks.

(23) Network registration is cumbersome. Information handling systems may interface with a wide variety of computer peripheral devices such as printers, monitors, wireless keyboards, digital pens, and audio/video headsets. Information handling systems, and computer peripheral devices, often require registration and configuration, especially in today's hybrid work hoteling environment. When office desks/cubicles are shared and hot-swapped between transient employees, manual network registration is cumbersome and time-consuming.

(24) FIGS. **2-3** illustrate a workspace-sharing environment, according to exemplary embodiments. FIG. **2** illustrates a shared workspace **200** found in many office buildings, hotels, libraries, and other shared environments. The workspace **200** is available for use by transient employees, hotel guests, patrons, and other users. FIG. **2** illustrates the workspace **200** as a generic cubicle **202** having a desk **204** and the information handling system **100** (illustrated as a desktop computer **206**). Because the workspace **200** is shared by many different users, an occupant **208** has reserved the workspace **200** for a period of time. As the occupant **208** walks through a building and to the workspace **200**, exemplary embodiments infer her physical location **210**, based on electromagnetic signals (such as GPS, radio, WI-FI, Bluetooth, NFC signals) transmitted by her personal device(s) **212**. FIG. **2** illustrates the occupant's personal device **212** as a smart cellular telephone **214**. The occupant's personal device **212**, however, may be a smartwatch, mobile laptop computer, a tablet computer, electronic employee/visitor badge, or any other electronic device.

(25) As the occupant **208** carries the smartphone **214**, the smartphone **214** establishes communications with various communications networks (such as cellular/GPS, radio, WI-FI®, BLUETOOTH®, and NFC signals) available within an office, hotel, or other building. As the occupant **208** walks, exemplary embodiments infer her indoor/outdoor location **210**, based on GPS and/or network presences registered to her smartphone **214**. Exemplary embodiments may thus pre-configure the desktop computer **206** to her preferred settings. Exemplary embodiments may also wirelessly register her smartphone **214** with available networks. So, when the occupant **208** arrives at the workspace **200**, her smartphone **214** is wirelessly paired with the computer **206** and ready to use, according to her desired configurations.

(26) FIG. **3** further illustrates electronic equipment **220** available within the workspace **200**. As the reader likely understands, the desktop computer **206** may interface with many wired/wireless peripheral devices **220**. Some of these peripheral devices **220** may include a keyboard, one or more video displays, a tactile mouse, a digital pen, external speaker(s), a video/web camera, a sound bar system, and/or a headphone. The workspace **200** may additionally or alternatively provide a docking station **222** that interfaces with any of the user/occupant's personal devices **212** (such as a mobile information handling system **100***a*, illustrated as a laptop computer **224**). Any or all of the electronic peripheral equipment **220** may interface with a shared network printer **226** via a communications network **228**. Moreover, any or all of the cubicle's electronic peripheral equipment **220** may interface via the communications network **228** with the user's mobile smartphone **214**.

(27) The shared workspace **200** poses many configuration problems. For example, when the occupant **208** arrives at the shared workspace **200**, the desktop computer **206** and other electronic peripheral equipment **220** may be in a low-power mode to conserve electrical power (for example due to non-use). Often, then, the hoteling occupant **208** (illustrated in FIG. **2**) wastes precious minutes “waking up” the electronic peripheral equipment **220**. Moreover, the occupant **208** wastes much time pairing/registering the electronic peripheral equipment **220**. The occupant **208**, for example, must manually pair or register their smartphone **214** and/or laptop **224** to the workspace's

WI-FI® network. The occupant **208** may further manually BLUETOOTH® pair her smartphone **214** and/or laptop **224** to the workspace's shared electronic peripheral equipment **220**. These network pairing and registrations are cumbersome and consume precious time, especially when the workspace **200** is tightly scheduled for back-to-back start/end reservations. When the current occupant's workspace **200** reservation ends, these pairing registrations must often be manually deleted or ended. As a further problem, when the workspace **200** reservation ends, the shared electronic peripheral equipment **220** stores/retains much data that may be personal and/or proprietary. The user/occupant **208** must remember to manually delete/clear this data from the shared electronic peripheral equipment **220** to prevent disclosure.

(28) Exemplary embodiments, instead, manage virtual pairings with the cubicle's shared electronic peripheral equipment **220**. Any or all of the electronic peripheral equipment **220** may interface with a hybrid work experience system or service **230**. The hybrid work experience system/service **230** is a computer server or cloud-based service that manages and configures the cubicle's shared electronic peripheral equipment **220**, based on the smartphone's location **210**. That is, as the occupant **208** walks through the building, on her way to the workspace **200**, at some point (such as a predefined location and/or time) the hybrid work experience system/service **230** begins configuring the cubicle's electronic peripheral equipment **220** to coincide with her arrival. When the occupant **208** arrives at the workspace **200**, for example, the shared electronic peripheral equipment **220** has been awoken from their low-power states.

(29) Virtual network pairing registrations **232** have been automatically and timely performed with her personal devices **212** (such as the smartphone **214** and the laptop **224**). Reserved software resources have been authorized, installed, and/or initialized. So, as soon as the occupant **208** enters the cubicle **202**, the workspace's shared electronic peripheral equipment **220** are ready for personalized use. The occupant **208** may immediately connect the laptop computer **224** to the docking station **22** (perhaps via a USB cable or a wireless pairing), thus establishing a time delimited, two-way communications TCP/IP session **233** between endpoints. The session **233**, for example, may be enabled from the reservation's start date/time and torn down or ended at the reservation's stop date/end time. The occupant wastes no time manually pairing and registering with the communications networks **208**. The occupant may thus immediately use the workspace **200** to create and share content, conduct video conference calls, play games/media, and other productive tasks.

(30) Exemplary embodiments provide a seamless, workspace ecosystem experience. In today's work environment, more and more people are working from home and only hoteling or sharing office workspaces **200**. Productivity is a premium during limited, reserved times of shared equipment. Because the workspace **200** is shared, the configurations of the electronic peripheral equipment **220** must be dynamically established, and perhaps torn down, in timely succession according to a reservation schedule and to the occupant's location **210**. Because the workspace's shared electronic peripheral equipment **220** may be just-in-time preconfigured for the occupant's arrival date/time reservation, the occupant **208** has an immediate best experience with the shared electronic peripheral equipment **220** and, by inference, the employer, hotel, library, landlord, owner, or building's service provider. Exemplary embodiments deliver continuity of service across multiple end user devices. Exemplary embodiments manage seamless fusion and selection of audio/video input and outputs, content sharing, and conferencing. Exemplary embodiments solve basic interoperability pain points across clients, docks, and ecosystem devices. The shared electronic peripheral equipment **220** are connected to the occupant's personal devices **212** using wired and wireless protocols.

(31) FIG. **4** illustrates more details for proximity-based configuration, according to exemplary embodiments. The hybrid work experience system/service **230** is another information handling system **100***c* and illustrated as a server **234**. The server **234** stores, executes, and/or hosts a hybrid work experience software application **236**. The hybrid work experience software application **236** is

stored in the memory **120**, and the hardware processors **102**/**104** execute the programming statements or languages representing the hybrid work experience software application **236**. The hybrid work experience software application **236** causes the server **234** to specially perform operations, such as receiving a workspace reservation **238** associated with the occupant's smartphone **214**. The occupant **208** (illustrated in FIG. **1**), in other words, has scheduled the workspace **200** from a start date/time to an end date/time. The occupant **208** may have further requested the workspace **200** for its hardware and software resources.

(32) While the workspace reservation **238** may be determined and managed by the hybrid work experience software application **236**, FIG. **4** illustrates a system solution in which the workspace reservation **238** is generated by, and sent from, a reservation system **240**. The reservation system **240** may be a cloud-based service, third party, or computer server (not shown for simplicity) that schedules different, shared workspaces **200** among individuals, teams, or other entities. The reservation system **240** matches available workspaces **200** to requests, perhaps according to date/time and to the requested hardware and software resources. Gaming engineers or users, for example, may require the highest performance workspaces. Video editors and digital artists may need the highest-resolution display capabilities. The reservation system **240** determines the appropriate workspace **200** and provides the workspace reservation **238** via the communications network **228** to the hybrid work experience system/service **230**, to the occupant's personal device **212**, and/or to the electronic peripheral equipment **220**.

(33) The hybrid work experience system/service **230** may also receive the location **210**. While the location **210** may be determined and managed by the hybrid work experience system/service **230**, FIG. **4** illustrates a system solution in which the location **210** is generated by, and sent from, a location system **242**. The location system **242** is a cloud-based service, third party, or computer server (not shown for simplicity) that interfaces with the occupant's personal devices **212** (such as the smartphone **214**) and with the hybrid work experience system/service **230**. The smartphone **214** stores and executes a device-side location software agent **244**. The device-side location software agent **244** is a software application that cooperates with the location system **242**, perhaps in a client/server relationship, to determine the location **210** associated with the smartphone **214** and, by inference, the individual occupant **208**.

(34) The location system **242**, for example, may obtain a GPS location reported by the smartphone **214** (such as when GPS signals are received within a building). The location system **242** may additionally or alternatively infer the location **210** (such as an indoor position) based on reception of electromagnetic signals sent by or received from the occupant's smartphone **214**. As the occupant **208** carries the smartphone **214**, the smartphone **214** sends signals to, and/or registers with, various access points to the communications networks **228** (perhaps cellular/GPS, radio, WI-FI®, BLUETOOTH®, NFC signals) available within an office, hotel, or other building.

(35) Because the occupant **208** is associated with her smartphone **214**, the smartphone's indoor location **210** is inferred by the location system **242** (perhaps based on signal strength and/or access point (AP) information) and sent via the communications network **228** to the hybrid work experience system/service **230** and/or to the location software agent **244**. The location system **242** and/or to the location software agent **244** may even consult a digital floor plan **246** that maps different workspace locations (such as the location of the cubicle **202**) to the various communications networks **228** available within the building. As the occupant walks within the building, the location system **242** may nearly precisely estimate and update the location **210** with respect to the digital floor plan **246** (for example, nearing an elevator or arriving at a particular floor level, hallway, entry, room, or the cubicle **202**).

(36) Governing policies **248** may be implemented. Once the smartphone's location **210** is determined (perhaps with reference to the floor plan **246**), the location **210** may be compared to the policies **248** (perhaps accessed by querying a policy database for the location **210** and retrieving/identifying the corresponding location-based policy). The policies **248** define events

and/or states to order or implement, based on the smartphone's location **210**. The policies **248**, for example, may be expressed as logical statements defining where and when certain network pairings/registrations/configurations **250** are commenced. As the smartphone **214** travels within the building, the hybrid work experience system/service **230** may push or command particular WI-FI®, BLUETOOTH®, and other network pairings and registrations to network access points, to the smartphone **214**, and/or to the cubicle's shared electronic peripheral equipment **220**.

(37) Exemplary embodiments may thus manage virtual pairings with the workspace's shared electronic peripheral equipment **220**. The hybrid work experience system/service **230** may also interface with a device-side hybrid work experience software agent **252** stored and executed by the occupant's personal device **212** (such as the smartphone **214** and/or the laptop **224** illustrated in FIG. **2**). The hybrid work experience system/service **230** may also interface with a workspace-side software agent **254** stored and executed by any or all of the workspace's electronic peripheral equipment **220**. The hybrid work experience system/service **230** cooperates with the software agents **244**, **252**, and **254**, perhaps in a client/server relationship, to dynamically configure/pair/register the smartphone **214**, the laptop **224**, and any other personal devices **212** for use with the cubicle's shared electronic peripheral equipment **220**. As the smartphone **214** and/or the laptop **224** moves through the building and toward the workspace **200**, exemplary embodiments begin configuring the various WI-FI®, BLUETOOTH®, and other communications networks **228** for immediate, productive use. So, as soon as the occupant **208** arrives at the cubicle **202**, the cubicle's shared electronic peripheral equipment **220** are ready for personalized use. The occupant wastes no time manually pairing and registering with the communications networks **228**. The occupant may thus immediately use the workspace **200** to create and share content, conduct video conference calls, play games/media, and other productive tasks.

(38) FIG. **5** is a block diagram illustrating a service architecture, according to exemplary embodiments. The location system **242** is illustrated as a cloud service that interfaces with the occupant's personal device **212**. The occupant's personal device **212** stores and executes the device-side location software agent **244** that cooperates with the location system **242** to determine the location **210**. The location **210** is thus sent to or shared with the hybrid work experience system/service **230**. The reservation system **240** is illustrated as a cloud service that interfaces with the hybrid work experience system/service **230**. The reservation system **240** generates and manages the workplace reservation **238** and sends the workplace reservation **238** to the hybrid work experience system/service **230**. When the hybrid work experience system/service **230** receives the workplace reservation **238** and the location **210**, the hybrid work experience system/service **230** may consult electronic databases to establish network pairings and other configurations. An electronic database **260** of peripherals, for example, stores and maintains database entries describing an inventory of peripheral devices (such as the electronic peripheral equipment **220** available at different, reservable workplaces **200**).

(39) The electronic database **260** of peripherals identifies equipment models, serial numbers, IP addresses, networking and other configuration parameters, and other information/data associated with any piece of the electronic peripheral equipment **220**. An electronic database **262** of workspaces stores and maintains database entries describing a list, roster, or inventory of workspaces **200** that are available for transient/hoteling uses. The electronic database **262** of workspaces identifies networks **228** that are available at each workspace **200**, along with networking information, IP addresses, and other configuration parameters. The hybrid work experience system/service **230** may thus query the databases **260** and **262** to identify the electronic peripheral equipment **220** associated with the workspace **200**, their corresponding network address, IEEE 802 MAC identifier, other configuration data, and LAN/WAN/WWAN networking data.

(40) As FIG. **5** illustrates, the hybrid work experience system/service **230** network pairs/registers based on the location **210**. The occupant's personal device **212** stores and executes the device-side hybrid work experience software agent **252**. The occupant's personal device **212** also stores and

executes the device-side location software agent **244**. The hybrid work experience system/service **230**, the device-side hybrid work experience software agent **252**, and/or the device-side location software agent **244** may thus cooperate to determine the location **210** associated with the occupant's personal device **212**. The hybrid work experience system/service **230** may thus interface with the device-side hybrid work experience software agent **252** and the device-side location software agent **244** to periodically or nearly continuously monitor the location **210** and to execute the corresponding networking configuration policies **248**. The hybrid work experience system/service **230** and the device-side hybrid work experience software agent **252** thus cooperate and compare the location **210** to the policies **248**.

(41) When the location **210** matches a location-based policy **248**, the device-side hybrid work experience software agent **252** causes the scheduled occupant's personal device **212** to identify, retrieve, and push/send the corresponding WI-FI®, BLUETOOTH®, USB, NFC, or other IEEE 802 networking configurations **250** to the electronic peripheral equipment **220** associated with the workplace **200**. FIG. **5**, for example, illustrates the occupant's personal device **212** sharing the networking configurations **250** with the docking station **222** operating in, or assigned to, the workspace **200**. The occupant's personal device **212** may send the networking configurations **250** via the communications network **228** to the IP address associated with the docking station **222**.

(42) When the docking station **222** receives the networking configurations **250**, the docking station **222** may then share/distribute/send the networking configurations **250** to the other electronic peripheral equipment **220** associated with the workspace **200**. The workspace-side hybrid work experience software agent **254**, for example, stored and executed by docking station **222**, instructs or causes the docking station **222** to send the networking configurations **250** to the other electronic peripheral equipment **220** assigned to the workspace **200**. By the time the occupant's personal device **212** arrives at the workspace **200**, exemplary embodiments have automatically registered and paired the transient user's smartphone **214** and laptop **224** with network access points serving the workspace **200** and with the electronic peripheral equipment **220** assigned to the workspace **200**.

(43) Exemplary embodiments thus provide an elegant networking solution for hoteling users. The location system **242** and the location agent **244** cooperate to identify the current location **210** associated with the occupant's personal device **214**, perhaps correlated to the floor plan **246**. The current location **210** may be determined in any geographical coordinates, units, or GIS format (such as the GeoJSON format). Once the current location **210** is determined, the hybrid work experience agent **252** maintains and manages a hybrid work state machine **270**. The hybrid work experience agent **252** and the hybrid work experience system/service **230** cooperate to identify, retrieve, and/or pull the networking configurations **250** and other best known configurations ("BKC") and secrets associated with the workspace equipment **220** operating at/in the booked/reserved workspace **200**.

(44) The hybrid work experience agent **252** may then provide software handlers to implement virtual-pairing and un-pairing. The workspace-side agent **254** (such as executed by the docking station **222**) may maintain the active session **233** with the hybrid work experience system/service **230** for receiving networking and other events associated with the policies **248**. The hybrid work experience system/service **230** stores the networking configurations **250** and other best known configurations ("BKC") and secrets associated with the workspace equipment **220**. The hybrid work experience system/service **230** also stores WI-FI®, BLUETOOTH®, and other networking profiles associated with wireless access points serving, or in proximity to, the workspace **200** and/or the workspace equipment **220**.

(45) Exemplary embodiments overcome many problems. In the hybrid work hoteling environment, for example, when the cubicle **202** is not in use, the docking station **222** and its connected peripherals **220** will be put into the low power state to conserve electrical power. This creates last mile problems like the end user manually waking up the cube's the docking station **222** and its connected peripherals **220** for preparation and pairing. The hoteling user must also manually un-

pair/clean when leaving the cube **202**. Exemplary embodiments, instead, prepare and pre-configure the cubicle **202** for a next/scheduled session **233**, based on the location **210**. The hybrid work experience system/service **230** sends commands or instructions to the IP address(es) associated with the equipment **220**, and the hybrid work experience system/service **230** and the workspace-side agent **254** cooperate to command and cause the equipment **220** to transition from low power (sleep) state to active state, perhaps only when the reserved user approaches to the cube (say <=X meters).

(46) When the scheduled session **233** completes or ends (such as indicated by the occupant's personal device **212** and/or the docking station **222**), the hybrid work experience agent **252** and/or the workspace-side agent **254** inform the hybrid work experience system/service **230**. The hybrid work experience system/service **230** and the workspace-side agent **254** cooperate to prepare the workspace **200** (such as the docking station **222** and the other peripheral equipment **220** assigned to the cubicle **202**) for next user session. Moreover, exemplary embodiments may also prepare the occupant's personal device **212** for the session **233**, based on the location **210**. The hybrid work experience agent **252** and the hybrid work experience system/service **230** cooperate to move the occupant's personal device **212** (such as the laptop computer **224**) from low power (sleep) state to active state, perhaps upon approach to the cubicle's floor (say <=X floors from the reserved workspace **200**).

(47) Once the location **210** indicates the laptop computer **224** is within a predefined radios/distance (say 1 floor away from the reserved cubicle **202**), the hybrid work experience agent **252**, the workspace-side agent **254**, and the hybrid work experience system/service **230** cooperate to enable the networking configurations **250** (such as a BLUETOOTH® stack) and to implement an IT Admin recommended configuration. Once the location **210** is near to the cubicle **202** (say <=X meters), the hybrid work experience agent **252**, the workspace-side agent **254**, and the hybrid work experience system/service **230** cooperate to initiate the virtual pairing with the cube's peripherals **220** and connect to them.

(48) Exemplary embodiments may initiate data cleanup. That is, the hybrid work experience agent **252**, the workspace-side agent **254**, and the hybrid work experience system/service **230** may cooperate to virtually un-pair and disconnect the occupant's personal device **212** from the peripheral equipment **220**, perhaps based on the location **210**. When the laptop computer **224** moves or strays from the cubicle **202** (say >X meters) for more than a predefined time, exemplary embodiments may infer the occupant's session has ended. The hybrid work experience agent **252**, the workspace-side agent **254**, and the hybrid work experience system/service **230** may cooperate to implement virtual un-pairing with cube's peripherals **220** and, after a predetermined time, delete any stored data (such as secrets and other proprietary/personal information) from the desktop computer **206**, the docking station **22**, and the other peripherals **220**.

(49) Exemplary embodiments thus provide a seamless, zero-touch proximity-based hybrid work solution. Exemplary embodiments monitor the dynamic location **210** and compare to the static location associated with the workspace **200**. Exemplary embodiments receive user/occupant intentions (such as start and stop the session **233**) and take actions. Exemplary embodiments thus provide an auxiliary service that automatically manages reservations, the peripheral endpoints, and network pairing processes/connections based on device proximity mapping (for example, the indoor location **210**). Moreover, because hybrid work environments likely have many different and assignable workspaces **200**, exemplary embodiments may scale for multiple reserved users and hybrid work cubes.

(50) FIGS. **6-8** illustrate the hybrid work state machine **270** and its algorithmic flowgraphs, according to exemplary embodiments. The hybrid work experience agent **252** maintains and manages the hybrid work state machine **270**. The hybrid work experience agent **252** is downloaded to the user's personal device **212** (such as the smartphone **214** and/or the laptop computer **224** illustrated in FIG. **3**). As FIGS. **6-7** illustrate, exemplary embodiments may have an initialization

state **272**. When the hybrid work experience agent **252** executes, the hybrid work experience agent **252** pulls the policies **248** from any network resource. While the policies **248** may have any logical structure or statement, at least some of the policies **248** may be location-based (for example, “distance to the cube for starting work=X feet,” “timeout for reservation=Y mins,” and “WiFi AP scanning frequency=Z secs”). After the policies **248** are retrieved, the hybrid work experience agent **252** may then wait for the next event (such as the reservation **238** describing a cube booking, illustrated in FIG. **3**).

(51) The hybrid work experience state machine **270** may have a pre-work state **274**. Once the workspace **200** is booked (such as the reservation **238**), the hybrid work experience agent **252** establishes communication with the hybrid work experience system/service **230** and imports the networking configurations **250** (for example, WI-FI®, BLUETOOTH®, and other networking profiles associated with wireless access points serving, or in proximity to, the workspace **200** and/or the workspace equipment **220**). The location agent **244** registers with the operating system for the wireless access point connect notification (using known registration methods, such as the MICROSOFT® WlanRegisterNotification).

(52) FIGS. **6** and **8** illustrate different, interim work states **276**. Once the user's personal device **212** arrives at a predetermined point (that is, the location **210** satisfies a location-based policy **248**), the user's personal device **212** (such as the smartphone **214** and/or the laptop computer **224**) will be connected automatically to the predefined access point (based on the imported networking configurations **250**). Once the user's personal device **212** is connected, the operating system (OS) will notify the location agent **244** saying the user's personal device **212** is connected to the imported WiFi AP. The location agent **244** scans for a nearby WiFi AP and periodically sends the details (BSSID & RSSI) to the location system **242**. The location system **242** will return the current location **210** (such as via an IndoorAtlas API and response in GeoJSON format). The current location **210** is then again compared to the policies **248** to determine a next event.

(53) One of the work states **276**, for example, is approach to cube's floor. If the location **210** becomes <=1 floor, exemplary embodiments may move or transition to the state “approach to cube's floor,” where the location agent **244** enables the BLUETOOTH® stack and uses the interfaces/APIs provided by hybrid work experience agent **252** to do the virtual-pairing with the cube's peripherals **220**. The location agent **244** notifies the hybrid work experience system/service **230** that the personal device **212** is in cube's floor. The hybrid work experience system/service **230** relays this event to hybrid work experience agent **252** to wake up, perform the virtual-pairing, and prepare the ‘to be connected’ peripheral devices **220** with the user preferred configuration. For example, the approaching occupant may have preferred and predefined in-cube camera capture settings with user's preferred color temperature, brightness, overall video settings. Similarly, the docking station **222** will be commanded to wake up its connected peripherals **220**.

(54) Another work state **276**, for example, is “approach to cube.” If the location **210** is <=X feet from the cubicle **202**, the location agent **244** moves to the next state “approach to cube.” The docking station **222** will be commanded to wake up its connected peripherals **220**.

(55) Another work state **276** is “active work.” On the user intent to start the session **233**, the location agent **244** will move to the next “active work” state. On entering this state, the hybrid work experience agent **252** will notify location agent **244** to stop scanning and getting the current 3D location **210**. The hybrid work experience agent **252** establishes the connection with the cube's wireless peripherals **220**. The peripherals **220** are thus paired and ready for productive use.

(56) On user intent to end the session **233**, the hybrid work experience agent **252** moves to a “post (Work)” state **278**. The user's intent to end the session **233** may be inferred from a disconnection of the laptop **224** from the docking station **222**. The user's intent to end the session **233** may also be inferred from the location **210** straying too far from the static location of the workspace **200**, perhaps for a predetermined max/min time (say 10 mins). On entering this state, the hybrid work experience agent **252** notifies the hybrid work experience system/service **230** that the user's

personal device **212** (such as the smartphone **214** and/or the laptop computer **224**) has left the cubicle **202** and, thus, intent to end the session **233**. The hybrid work experience system/service **230** then checks for a next, upcoming/successive reservation **238** for the workspace **200** by different user.

(57) If so, the hybrid work experience system/service **230** sends that user's virtual pairing information (such as the networking configurations **250**) to the hybrid work experience agent **252** installed and executed by the next user's personal device **212**. The hybrid work experience system/service **230** also notifies the workspace-side agent(s) (installed and executed by the peripheral equipment **220**) to perform virtual unpairing and cleanup with the current user's personal device **212**. The hybrid work experience agent **252** virtually pairs the next reserved user's personal device **212** and executes virtual un-pairings of the BLUETOOTH® peripherals **200**. The hybrid work experience agent **252** also executes a cleanup deletion of any BLUETOOTH®, WI-FI®, and other network pairing configurations stored at the user's personal device **212**, the peripheral equipment **220**, and the hybrid work experience system/service **230**. Because the work session may be freshly/newly created on any memory **120** (such as a dedicated portion, partition, folder, or other diskspace), exemplary embodiments may store or write the session data, including the networking configurations **250**, to the single, dedicated disk location.

(58) When the session **233** ends, all session-related data, including the networking configurations **250**, may thus be deleted from the single, dedicated disk location. So, even if the occupant has previously reserved the same workspace **200**, and thus previously seen/registered the user's personal device(s) **212**, those historical networking configurations **250** are deleted and not retained. With each new reservation, then, the user's personal device(s) **212** are wirelessly unknown and no historical or legacy networking configurations **250** exist. Exemplary embodiments, instead, repeatedly process the user's personal device(s) **212** as newly seen and never before paired/registered. The hybrid work experience agent **252** thus removes the WiFi AP profile after a time-delay (based on the policy **248**). The hybrid work experience agent **252** may, optionally, based on the policy **248**, put the user's personal device **212** to the low power state. The hybrid work experience agent **252** may then move to the initialization state **272** for fresh pairings as an unknown device.

(59) Overall, the hybrid work experience state machine **270** provides a seamless, zero-touch proximity-based hybrid work solution. Exemplary embodiments receive user/occupant intentions (such as start and stop session) and take actions. Exemplary embodiments seamlessly, with zero manual inputs, tie the booking events, the post booking events at the office floor and cube and the network pairing actions (paring, connection, disconnection, unpairing and cleanup). Exemplary embodiments are easily scaled for multiple hybrid workspaces **200**.

(60) Exemplary embodiments may be easily adapted to home environments. The architecture, software agents, and states illustrated in FIGS. **2**-**8** may be utilized for shared home spaces with shared peripheral devices. Policies may be defined for the locations of home-based desks, tables, and rooms, their corresponding consumer equipment, and hot-swapping residents.

(61) Exemplary embodiments may connect to other personal devices **212**. Many user/occupants, for example, may prefer to connect their personal speaker, mouse, headset, and other peripherals. The user may simply prefer the feel, sound, performance, and other features of her personal devices **212**. The hybrid work experience agent **252** may thus store, access, and connect to any of the user's personal devices **212** using cached preferences. For example, at cubicle #**1**, the user may authorize connecting the cubicle's BLUETOOTH® speaker, keyboard, and mouse. At cubicle #**2**, however, the user may authorize only the cubicle's BLUETOOTH® keyboard and mouse and, instead, prefer to connect her personal BLUETOOTH® headset.

(62) Exemplary embodiments may also be adapted for multi-user sharing of the workspace **200**. Multiple occupants, in other words, may reserve the workspace **200** for collaboration. In such a collaborative reservation **238**, the workspace-side agent **254** (installed and operating in the IP-

based smart docking station **222**) works along with the hybrid work experience agent **252** to prepare and connect the right cube's peripherals **220** to the users' laptops **224** and other personal devices **212**. The workspace-side agent **254** and the hybrid work experience agent **252** also cooperate to connect the occupants' personal peripherals, perhaps based on the policy **248**. For example, occupant/user #**1** may authorize connecting the cubicle's display, keyboard, and mouse, but she may prefer her personal BLUETOOTH® pen device. Occupant/User #**2**, however, may decline all the cubicle's peripheral devices **220** and, instead, prefer to connect and use only her personal devices **212**.

(63) Exemplary embodiments may also be adapted for enhanced locational determinations. For example, in addition to retrieving, storing, and using WI-FI® AP details, the user's personal devices **212** (such as the laptop computer **224**) may provide WWAN radio details (Unique ID, direction, signal strength) to the location system **242** for identifying the location **210**.

(64) Exemplary embodiments thus provide elegant solutions for hoteling users. Exemplary embodiments implement actionable events, based on the dynamic location **210**, the static location assigned to the workspace **200**, and the occupant's intent (such as start/stop of the session). Exemplary embodiments take actions using the software state machine **270**. The workspace **200** is thus pre-prepared or pre-configured for user's preferences, and virtual pairing/unpairing of BLUETOOTH® peripherals **220** provides automatic, seamless connection and cleanup on end-session. The reservation system **238** and/or the location system **242** may be vendor independent and interface with any management, booking, and location solutions.

(65) FIG. **9** is a shows a method or process for software-based locational network pairing, according to exemplary embodiments. The location agent **244** instructs or causes the occupant's personal device **212** to scan, receive, or identify electromagnetic signals (Block **300**). The signals, for example, may be radio signals emitted by wireless network access points. The signals may also exhibit frequencies associated with the ISM band in the electromagnetic spectrum (such as those transmitted by BLUETOOTH® devices/networks). Any details associated with the electromagnetic signals are conveyed to the location system/service **222**. The location system/service **222** return sends the current location **210** (perhaps expressed as a 3D-distance from the occupant's personal device **212** to the workspace **200** (Block **302**). The location **210** is compared to an initial one or more gatekeeper policies **248** (Block **304**) (such as whether the occupant's personal device **212** is a floor away from the workspace **200**).

(66) If the policy **248** is not satisfied (such as the location **210** being greater than a floor), the location agent **244** waits a predetermined time (Block **306**) and rescans for the electromagnetic signals (Block **300**). If, however, the location **210** satisfies the initial policies **248** (Block **304**), then the location **210** may be compared to subsequent or nested policies **248** (Block **308**). If the subsequent or nested policies **248** are not satisfied, then the location agent **244** notifies the hybrid work experience agent **252** to move to the approach to floor state (Block **310**, as illustrated by FIGS. **6** and **8**), and the location agent **244** waits a predetermined time (Block **306**) and rescans for the electromagnetic signals (Block **300**). Should, however, the location **210** satisfy the subsequent or nested policies **248** (Block **308**), the location agent **244** notifies the hybrid work experience agent **252** to move to the approach to cube state (Block **312**, as also illustrated by FIGS. **6** and **8**), and the location agent **244** waits a predetermined time (Block **306**) and rescans for the electromagnetic signals (Block **300**).

(67) Although only a few exemplary embodiments have been described in detail herein, those skilled in the art will readily appreciate that many modifications are possible in the exemplary embodiments without materially departing from the novel teachings and advantages of the embodiments of the present disclosure. Accordingly, all such modifications are intended to be included within the scope of the embodiments of the present disclosure as defined in the following claims. In the claims, means-plus-function clauses are intended to cover the structures described herein as performing the recited function and not only structural equivalents.

(68) Devices, modules, resources, or programs that are in communication with one another need not be in continuous communication with each other, unless expressly specified otherwise. In addition, devices, modules, resources, or programs that are in communication with one another can communicate directly or indirectly through one or more intermediaries.
(69) The above-disclosed subject matter is to be considered illustrative, and not restrictive, and the appended claims are intended to cover any and all such modifications, enhancements, and other embodiments that fall within the scope of the present invention. Thus, to the maximum extent allowed by law, the scope of the present invention is to be determined by the broadest permissible interpretation of the following claims and their equivalents, and shall not be restricted or limited by the foregoing detailed description.

## Claims

1. A method that automatically network pairs an information handling system to a wireless network broadcast by a wireless access point, the method comprising: receiving a hybrid work experience reservation identifying a hybrid workspace reserved for a hybrid work session; successively receiving networking information reported by the wireless access point; sending, by the information handling system, the networking information reported by the wireless access point to a location service; receiving, by the information handling system, indoor locations generated by the location service based on the networking information reported by the wireless access point, each indoor location of the indoor locations representing a corresponding distance to the hybrid workspace reserved for a communications session; comparing the indoor locations to location-based policies defined for the hybrid workspace; in response to an indoor location satisfying a policy of the location-based policies, instructing a docking station to electrically power peripheral equipment associated with the hybrid workspace; in response to another indoor location of the indoor locations satisfying another policy of the location-based policies, identifying a wireless networking information associated with the wireless access point serving the hybrid workspace by querying a hybrid work experience service for a wireless networking information associated with a hybrid work experience reservation; and automatically network pairing, by the information handling system, to the wireless network broadcast by the wireless access point serving the hybrid workspace using the wireless networking information associated with the hybrid work experience reservation.
2. The method of claim 1, further comprising selecting a hybrid work experience state associated with the location-based policies.
3. The method of claim 1, further comprising selecting a hybrid work experience state based on the indoor locations.
4. The method of claim 1, wherein in response to an end of the hybrid work experience reservation, further comprising deleting the wireless networking information from the information handling system.
5. The method of claim 1, further comprising receiving a locational update to the indoor locations generated by the location service.
6. The method of claim 1, further comprising establishing a communications session associated with the hybrid work experience reservation.
7. A system that automatically pairs to a wireless network broadcast by a wireless access point, the system comprising: a hardware processor; and a memory device storing instructions that when executed by the hardware processor perform operations, the operations including: receiving a hybrid work experience reservation identifying a hybrid workspace reserved for a hybrid work session; successively receiving networking information reported by wireless access points; sending the networking information reported by the wireless access points to a location service; receiving indoor locations generated by the location service, each of the indoor locations representing a

corresponding distance to the hybrid workspace reserved for a communications session; comparing the indoor locations to location-based policies defined for the hybrid workspace; in response to an indoor location of the indoor locations satisfying a policy of the location-based policies, instructing a docking station to electrically power peripheral equipment associated with the hybrid workspace; in response to another indoor location of the indoor locations satisfying another policy of the location-based policies, identifying a wireless networking information associated with the wireless access point serving the hybrid workspace by querying a hybrid work experience service; and automatically network pairing to the wireless network broadcast by the wireless access point serving the hybrid workspace using the wireless networking information.

8. The system of claim 7, wherein the operations further include selecting hybrid work experience states based on the location-based policies.

9. The system of claim 7, wherein the operations further include selecting hybrid work experience states based on the indoor locations.

10. The system of claim 7, wherein in response to an end of the hybrid work experience reservation, the operations further include deleting the wireless networking information.

11. The system of claim 7, wherein the operations further include establishing a communications session associated with the hybrid work experience reservation.

12. The system of claim 7, wherein the operations further include automatically pairing to the peripheral equipment associated with the hybrid workspace.

13. The system of claim 7, wherein the operations further include establishing a communications session with the docking station associated with the hybrid workspace.

14. The system of claim 13, wherein the operations further include ending the communications session with the docking station associated with the hybrid workspace.

15. A memory device storing instructions that when executed perform operations that automatically pairs to a wireless network broadcast by a wireless access point, the operations including: receiving a hybrid work experience reservation identifying a hybrid workspace reserved for a hybrid work session; successively receiving networking information reported by wireless access points; sending the networking information reported by the wireless access points to a location service; receiving indoor locations generated by the location service, each indoor location of the indoor locations representing a corresponding distance to the hybrid workspace reserved for communications session; comparing the indoor locations to location-based policies defined for the hybrid workspace; in response to an indoor location of the indoor locations satisfying a policy of the location-based policies, instructing a docking station to electrically power peripheral equipment associated with the hybrid workspace; in response to another indoor location of the indoor locations satisfying another policy of the location-based policies, identifying a wireless networking information associated with the wireless access point serving the hybrid workspace by querying a hybrid work experience service; and automatically network pairing to the wireless network broadcast by the wireless access point serving the hybrid workspace using the wireless networking information.

16. The memory device of claim 15, wherein the operations further include selecting hybrid work experience states based on the location-based policies.

17. The memory device of claim 15, wherein the operations further include selecting hybrid work experience states based on the indoor locations.

18. The memory device of claim 15, wherein the operations further include establishing a communications session with the docking station associated with the hybrid workspace.

19. The memory device of claim 18, wherein the operations further include ending the communications session with the docking station associated with the hybrid workspace.

20. The memory device of claim 15, wherein after a predetermined time expires, the operations further include deleting the wireless networking information.