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AiMesh is a revolutionary wireless networking technology developed by ASUS. It allows you to create a mesh network using multiple ASUS routers, enabling seamless connectivity and coverage throughout your home or office. With AiMesh, gone are the days of Wi-Fi dead spots and weak signals in certain areas.Unlike traditional Wi-Fi range extenders, which typically have their own network name and require separate logins, AiMesh creates a single, unified network. This means you can move around your home without having to manually switch networks or experience interruptions in your connection as you pass from one routers coverage area to another. It provides a seamless and consistent Wi-Fi experience, allowing you to stay connected with ease.One of the key advantages of AiMesh is its scalability. You can start with just one ASUS router and easily expand your network by adding more compatible ASUS routers. This flexibility makes AiMesh a cost-effective solution for homes and businesses of all sizes.Another notable feature of AiMesh is its intelligent self-organizing network. Once youve added multiple routers to your AiMesh network, they will automatically determine the optimal connection paths and adapt to changes in the environment. This dynamic optimization ensures that you always get the best possible Wi-Fi performance.AiMesh is not limited to a specific ASUS router model or series. It is backward compatible, meaning you can use routers from different generations or product lines to build your mesh network. This allows you to make the most of your existing networking equipment while enjoying the benefits of a mesh system.With AiMesh, you have the freedom to customize your network according to your needs. You can designate a specific router as the primary router and other routers as nodes, or you can configure each router to act as a standalone router while still being part of the mesh network. This flexibility gives you full control over how your network operates.Benefits of AiMeshAiMesh offers a wide range of benefits that make it an attractive solution for those looking to improve their home or office network. Here are some of the key advantages of using AiMesh:Seamless Coverage: AiMesh creates a unified network throughout your space, eliminating Wi-Fi dead spots and ensuring consistent coverage in every corner. You can enjoy uninterrupted wireless connectivity as you move around without experiencing signal drops or the need to switch networks.Cost-effective Solution: AiMesh allows you to leverage your existing ASUS routers, making it a cost-effective alternative to purchasing a dedicated mesh Wi-Fi system. You can start with just one compatible router and expand your network by adding more routers as needed, saving you money in the process.Customizable Network: With AiMesh, you have the flexibility to configure your network to suit your specific requirements. You can designate a primary router and configure additional routers as nodes, or choose to use each router as a standalone device while still benefiting from mesh network capabilities.Intelligent Self-Organizing Network: AiMesh routers intelligently analyze the network environment and dynamically optimize the connection paths to ensure optimal performance. This adaptive technology means your network is always optimized for speed and stability, even as the network conditions change.Backward Compatibility: AiMesh is compatible with a wide range of ASUS routers, including ones from different generations or product lines. This means you can make use of your existing networking equipment, maximizing the value and lifespan of your devices.Easy Management: AiMesh provides a user-friendly interface that makes it easy to manage your network. You can centrally control and monitor all connected routers and customize network settings, such as SSID and security, from a single dashboard.These benefits make AiMesh an attractive option for those seeking a reliable, scalable, and cost-effective solution to enhance their home or office Wi-Fi network. How does AiMesh work?AiMesh works by creating a mesh network using multiple ASUS routers. This network is designed to provide seamless Wi-Fi coverage throughout your home or office by intelligently distributing the wireless signal and optimizing the connection paths. The following steps outline how AiMesh works:Add ASUS Routers: To create an AiMesh network, you need to have at least one compatible ASUS router. You can start with a single router and add more routers later to expand your network. The routers should be within the range of Wi-Fi connectivity and should have the AiMesh capability.Establish Primary Router: Select one of the routers to serve as the primary router. This router will connect directly to your modem and act as the main gateway for your network. The primary router will handle the internet connection and distribute it to other routers in the AiMesh network.Configure Routers: Once youve designated the primary router, you need to configure the additional routers as AiMesh nodes. This can be done through the ASUS routers web-based interface or mobile app. Each router should be updated with the latest firmware and set up with the same Wi-Fi network name (SSID) and password.Sync Routers: After configuring the routers, they need to be synced together to form a mesh network. The synchronization process can usually be initiated from the primary routers web interface or app. The routers will communicate with each other and establish a secure connection to form the AiMesh network.Optimize Connection Paths: Once the AiMesh network is established, the routers will continuously monitor the network environment and optimize the connection paths. They will dynamically adjust the transmit power and channel allocation to ensure the best possible signal strength and minimize interference. This optimization helps to provide a seamless and stable Wi-Fi experience.Manage Network: With the AiMesh network up and running, you can manage and monitor it through the ASUS routers web interface or mobile app. You can view the status of each router, check connected devices, customize network settings, and perform firmware updates all from one centralized dashboard.By following these steps, AiMesh enables you to create a powerful and efficient mesh network that extends your Wi-Fi coverage throughout your home or office, delivering a seamless and reliable internet connection.Components required for AiMeshTo set up an AiMesh network, you will need a few essential components. These components ensure that your network functions properly and allow you to take full advantage of AiMesh technology. Here are the main components required:ASUS Routers: The primary component for AiMesh is ASUS routers. While AiMesh is compatible with various ASUS router models, it is important to ensure that the routers you choose specifically support AiMesh functionality. You can check the ASUS website or product documentation to confirm if your routers are compatible.Modem: You will need an existing modem or a modem/router combo to connect to the primary ASUS router. The modem provides the internet connection that will be distributed throughout your AiMesh network. Make sure your modem is compatible with your Internet Service Provider (ISP) and supports the required connection type (e.g., DSL, cable).Ethernet Cables: Ethernet cables are used to establish both the initial connection between the modem and primary router, as well as the connections between the primary router and any additional AiMesh nodes. High-quality Ethernet cables are recommended, as they ensure reliable and stable connections.Power Supply: Each router in the AiMesh network requires a power supply to operate. Ensure that you have the necessary power adapters and outlets available to provide power to each router. It is important to use the original power adapters provided by ASUS to ensure compatibility and safety.Compatible Devices: To take advantage of AiMesh and enjoy seamless connectivity, you will need compatible devices such as laptops, smartphones, tablets, or smart home devices. These devices should support Wi-Fi connectivity and be able to connect to the AiMesh network.ASUS Router Firmware: It is crucial to ensure that the ASUS routers in your AiMesh network are updated with the latest firmware. The firmware updates may include new features, bug fixes, and optimizations that enhance the AiMesh functionality and overall performance of the routers.By having these components ready and properly set up, you can create a robust and reliable AiMesh network that expands your Wi-Fi coverage and offers seamless connectivity throughout your home or office.Setting up AiMeshSetting up AiMesh is straightforward and can be done by following a few simple steps. By carefully configuring each router in your AiMesh network, you can create a unified and powerful wireless network. Heres how to set up AiMesh:Choose a Primary Router: Select one of the ASUS routers to serve as the primary router. This router will be connected to your modem and act as the main gateway for your network.Configure the Primary Router: Connect the primary router to your modem using an Ethernet cable. Access the routers web-based interface or mobile app to configure the network name (SSID), password, and other settings based on your preferences. Ensure that you have the latest firmware installed to take advantage of the newest features and improvements.Add Additional Routers as Nodes: Take the secondary ASUS routers that will extend your AiMesh network, and connect them to the primary router using Ethernet cables. Power them on and ensure they are within range of the primary routers Wi-Fi signal.Configure Additional Routers: Access each additional routers web-based interface or mobile app and go through the setup process. Make sure to choose the AiMesh mode and follow the on-screen instructions to connect them to your primary router. Keep the network name (SSID) and password consistent across all routers in the AiMesh network.Sync Routers: After configuring the additional routers, they will automatically sync with the primary router to form the AiMesh network. The routers will communicate and establish a seamless connection to ensure optimal performance and coverage.Verify the AiMesh Network: Once the routers are synced, verify that the AiMesh network is functioning properly. Check if your devices can seamlessly switch between routers as you move around your home or office without experiencing any interruptions in the Wi-Fi connection.Positioning the Routers: To achieve optimal coverage, ensure that you position the routers strategically throughout your space. Place them in areas where the Wi-Fi signal strength is low or where you experience dead spots. Experiment with different positions to find the best placement for each router.Perform Regular Updates: It is important to keep all the routers in your AiMesh network up to date by performing regular firmware updates. This ensures that you have the latest features, bug fixes, and overall performance improvements.Following these steps will guide you through the process of setting up AiMesh and creating a robust mesh network that extends your Wi-Fi coverage and provides seamless connectivity throughout your home or office. Configuring AiMeshOnce you have set up your AiMesh network, you may want to customize and fine-tune certain settings to optimize its performance and meet your specific requirements. Here are some key configurations you can consider:AiMesh Node Roles: By default, all routers in the AiMesh network act as AiMesh nodes, extending the coverage of the primary router. However, you can assign specific roles to each node. For example, you can designate one router as the main AiMesh router and set others as AiMesh nodes. This allows you to assign the primary router more processing power and allocate the nodes effectively.Wireless Settings: You may want to adjust the wireless settings of your AiMesh network to suit your needs. In the routers web interface or app, you can modify the SSID and password, enable or disable guest networks, and configure the wireless frequencies (2.4 GHz or 5 GHz) based on your desired network performance and compatibility with your devices.QoS (Quality of Service): Quality of Service settings allow you to prioritize specific devices or applications on your network to ensure they receive optimal bandwidth. This is useful when you want to allocate more network resources to devices or services that require high-speed connections, such as online gaming or streaming.Parental Controls: AiMesh routers often include built-in parental control features that enable you to restrict internet access for certain devices or set time limits. You can use these controls to manage childrens internet use or protect against unauthorized access from certain devices.Guest Network: Consider enabling a guest network if you frequently have visitors who need temporary Wi-Fi access. This allows guests to connect to a separate network without accessing your main network or sharing your Wi-Fi password.Security and Firewall: Its crucial to ensure the security of your AiMesh network. Configure strong login passwords, enable encryption protocols (such as WPA2), and regularly update firmware to protect against potential security vulnerabilities. Additionally, enable the routers built-in firewall to add an extra layer of protection against unauthorized access.Advanced Settings: If you are tech-savvy and want more control over your network, explore the advanced settings of your AiMesh routers. This may include options like port forwarding, VPN configurations, DNS settings, or IPv6 support. Be cautious when adjusting advanced settings, as incorrect configurations could impact network performance.Remember to review and save your configurations after making any changes. Experiment with different settings to find the optimal configuration that meets your specific needs and ensures the best performance and security for your AiMesh network.Managing AiMesh NetworkManaging your AiMesh network is essential for maintaining optimal performance and troubleshooting any issues that may arise. Here are some key aspects of managing your AiMesh network:Centralized Management: Most AiMesh systems offer a centralized management interface through the routers web-based interface or a dedicated mobile app. This allows you to access and control all the routers in your AiMesh network from a single, convenient dashboard.Monitoring Network Status: Use the management interface to monitor the status of your AiMesh network. You can check the connectivity and signal strength of each router, view the number and types of connected devices, and monitor network usage to ensure smooth operation and identify any potential issues.Firmware Updates: Regularly check for firmware updates for your AiMesh routers. Firmware updates often include bug fixes, performance improvements, and new features. Update the firmware of each router in your AiMesh network to ensure compatibility and stability.Troubleshooting: If you experience any issues with your AiMesh network, the management interface provides troubleshooting tools. You can check for any error messages, review logs, perform diagnostic tests, and reset routers if needed. These tools help identify and resolve common connectivity issues.Device Management: The management interface allows you to manage devices connected to your AiMesh network. You can view a list of connected devices, assign them to specific access control groups, prioritize bandwidth allocation, or even block devices from accessing the network.Band Steering: If your routers support band steering, you can enable this feature through the management interface. Band steering helps optimize device connections by automatically guiding them towards the most suitable frequency (2.4 GHz or 5 GHz) based on device capabilities and network conditions.System Notifications: Configure email or push notifications to stay informed about the status of your AiMesh network. Notifications can alert you to important events, such as firmware updates, network issues, or new device connections.Backup and Restore: Consider periodically backing up the configuration settings of your AiMesh network. This ensures that if any router needs to be reset to factory settings or if you replace a router, you can easily restore the network settings without the need for reconfiguration.User Support: ASUS provides comprehensive support resources, including user manuals, online forums, and technical support services. If you encounter complex issues or need assistance, refer to these resources for guidance and to troubleshoot specific problems.Regularly managing and maintaining your AiMesh network ensures a stable and optimized Wi-Fi experience, allowing you to make the most of your mesh networks capabilities.Troubleshooting AiMesh IssuesWhile AiMesh is designed to provide a seamless and reliable wireless network, occasional issues may arise. Here are some common AiMesh issues you might encounter and troubleshooting steps to address them:Connection Dropouts: If you experience intermittent Wi-Fi connections or frequent dropouts, check for any physical obstructions or interference that may be affecting the signal. Ensure that the routers are placed in optimal positions to provide maximum coverage. You can also try adjusting the channel settings or updating the router firmware.Speed and Performance Issues: If you notice slow speeds or poor performance, ensure that all routers in the AiMesh network have the latest firmware installed. Consider restarting the routers to refresh the network. Also, check for any bandwidth-intensive devices or applications that may be consuming excessive network resources.Configuration Errors: Incorrect configuration settings can cause issues in your AiMesh network. Double-check the network name (SSID) and password consistency across all routers. Ensure that the primary router is properly connected to the modem and that the secondary routers are correctly configured as AiMesh nodes.Device Connectivity Problems: If specific devices are unable to connect or experience difficulties in connecting to the AiMesh network, try resetting the network settings on those devices. You can also check if MAC address filtering or access control settings are blocking the devices from connecting to the network.Poor Signal Coverage: If you have areas with weak Wi-Fi signal coverage, consider relocating the routers to improve coverage. Ensure that the routers are placed away from any potential sources of interference, such as other electronic devices or thick walls. Adding additional AiMesh nodes closer to the areas of weak coverage can also help extend the signal.Interference from Nearby Networks: If you experience interference from nearby Wi-Fi networks, try changing the wireless channel on your routers. By selecting a less congested channel, you can reduce interference and improve signal quality.Router Firmware Issues: Firmware bugs or compatibility issues can impact the performance of your AiMesh network. Check the ASUS support website for the latest firmware updates and install them to ensure compatibility with your devices and to address any known issues.Factory Reset: As a last resort, if you are still facing persistent issues, you can perform a factory reset on your routers. This will restore the routers to their default settings and remove any conflicting configurations. Remember to reconfigure your AiMesh network after the reset.If you are unable to resolve the issues with your AiMesh network, consider reaching out to ASUS customer support for further assistance or consult online forums where other AiMesh users may have encountered similar issues and found solutions. AiMesh vs. Traditional Mesh SystemsWhen it comes to extending Wi-Fi coverage and creating a seamless network, both AiMesh and traditional mesh systems offer solutions. Here are some key differences between AiMesh and traditional mesh systems:Flexibility and Compatibility: AiMesh provides the flexibility to build a mesh network using existing ASUS routers. This means you can make use of your current routers and expand your network as needed. In contrast, traditional mesh systems usually require purchasing a specific set of mesh routers that are designed to work together.Scalability: AiMesh allows you to add additional ASUS routers to your network, enabling easy scalability. You can start with one router and gradually expand the network by adding more routers as required. Traditional mesh systems often have a predefined limit on the number of mesh nodes that can be added to the network.Cost-effectiveness: Using AiMesh can be a cost-effective solution as it leverages your existing ASUS routers. You dont need to invest in a complete set of new mesh routers. In contrast, traditional mesh systems require purchasing a dedicated mesh Wi-Fi system, which can be more expensive.Customization: AiMesh allows you to customize your network according to your specific needs. You have the flexibility to designate a primary router, configure additional routers as nodes, or use each router as a standalone device while still benefiting from mesh network capabilities. Traditional mesh systems have a fixed configuration that may not allow this level of customization.Technological Advancements: ASUS regularly releases firmware updates for their routers, including those that support AiMesh. This ensures that you have access to the latest features, performance enhancements, and security updates. Traditional mesh systems may have less frequent firmware updates or limited support in comparison.Brand Consistency: AiMesh is limited to the ASUS router ecosystem. If you have routers from different brands, you will not be able to create an AiMesh network with them. In contrast, traditional mesh systems can support routers from various manufacturers, allowing for greater flexibility in combining different brands and models to create a mesh network.Overall, both AiMesh and traditional mesh systems are designed to enhance Wi-Fi coverage and provide seamless connectivity. AiMesh offers the advantage of flexibility, cost-effectiveness, and scalability, especially for users who have existing ASUS routers. On the other hand, traditional mesh systems may offer greater customization options and compatibility with routers from different manufacturers. Consider your specific needs and preferences when choosing between AiMesh and traditional mesh systems to find the best solution for your network requirements. The latest and greatest firmware includes the new AiMesh GUI and quite a few new features - seems AiMesh 2.0 has matured nicely. Included is the promise "System optimization: one click in AiMesh to optimize the topology" - while I've found the button, does anyone know what it actually does (ie. what settings does it attempt to optimise / tinker with)?! Sounds great (!) however, having spent ages before finally getting an AiMesh setup that seems reliable (touch wood!) I'm a little scared to press it! :SThanks. The latest and greatest firmware includes the new AiMesh GUI and quite a few new features - seems AiMesh 2.0 has matured nicely. Included is the promise "System optimization: one click in AiMesh to optimize the topology" - while I've found the button, does anyone know what it actually does (ie. what settings does it attempt to optimise / tinker with)?! Sounds great (!) however, having spent ages before finally getting an AiMesh setup that seems reliable (touch wood!) I'm a little scared to press it! :SThanks. If you select it, it tells you that it is going to optimize (re-arrange) your wireless backhauls. I suspect that is all it does. If you have a simple AiMesh and/or one that is already arranged to your liking, I would not select it. OE My ASUSWRT 5.0 AiMesh RT-AX88U_Pro 3.0.0.6.102_33352 + RT-AX86U_Pro 3.0.0.6.102_34349 If you select it, it tells you that it is going to optimize (re-arrange) your wireless backhauls. I suspect that is all it does. If you have a simple AiMesh and/or one that is already arranged to your liking, I would not select it.View attachment 29896OE Thanks. Figured as much. In the past I've had some seemingly nonsensical daisy-chaining of nodes' backhauls, this seems to have improved of late (ie. doesn't randomly switch) and anchored by now being able to manually select what links to what.But what I don't understand is - what does this "optimisation" do differently? I thought the AiMesh backhaul setup was constantly reevaluating, hence sometimes things would switch around (albeit previous it seems rather poor judgement was made!).. if this is the case then I'm just wondering how selecting this one-off optimisation does any better/different? Thanks. Figured as much. In the past I've had some seemingly nonsensical daisy-chaining of nodes' backhauls, this seems to have improved of late (ie. doesn't randomly switch) and anchored by now being able to manually select what links to what.But what I don't understand is - what does this "optimisation" do differently? I thought the AiMesh backhaul setup was constantly reevaluating, hence sometimes things would switch around (albeit previous it seems rather poor judgement was made!).. if this is the case then I'm just wondering how selecting this one-off optimisation does any better/different? If you really want to know, try it for your network. As I see it, it just restarts things and the usual logic is re-applied. Why would it go above and beyond that which it already should have done. The system should optimize automatically... they should remove that control and finish the code.OE My ASUSWRT 5.0 AiMesh RT-AX88U_Pro 3.0.0.6.102_33352 + RT-AX86U_Pro 3.0.0.6.102_34349 Share copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. [AiMesh] How to Improve the Signal Quality between your AiMesh Router and AiMesh Node? To provide you more detailed instruction, you can also click ASUS Youtube video link below to know more about How to manage your AiMesh extendable network with the ASUS Router app. WiFi performance depends on how you place and connect your router and node. Some commonly used appliances might be an interference to your wireless signal. If you keep seeing the signal quality between your AiMesh devices presented on AiMesh page is weak, displaying an orange line, please refer to the following suggestions to move your AiMesh devices for a better signal.ForAiMesh introduction, please check Somefeatures may vary due todifferent models and differentfirmware versions.How to distinguish the signal quality in my AiMesh system?You may click the information icon in the Web GUI to pop up the level chart or refer to picture below.Please refer toHow to enter the router setting page(Web GUI)to learn more.If you are using wireless connection1. We suggest you to locate your AiMesh router and node between 3-5meters. 2. Try to place your router and node on flat and hard surface.3. Try to place your node in the center of your house. The fewer the walls (and the less substantial their inner material) between your router and node, the better your performance will be. Houses with dense materials like plaster, lath, or chicken wire in the walls are particularly hard for WiFi waves. Whenever possible, aim for direct line of sight between routers.4. Routers radiate their signal more upwards than downwards, but mostly along the planethey are placed on. It is best to place your routers at a height halfway between the floor and the ceiling, not on the ground.5. If you are using smart connect, please try to turn off smart connect then try again. Please refer to [Wireless Router] How to configure the Smart Connect in ASUS Router? to learn more.6. Try to disable the DFS channels. [Wireless Router] What is DFS (Dynamic Frequency Selection) and how does it work on ASUS router?7. Try to reset your AiMesh system to default and manual set up and see if issue persist. Please stay in default setting and do not import a pre-saved setting file to prevent any possible connection issue.8. Please try to switch the role of mesh router and mesh node then try again. (Mesh router to be mesh node, mesh node to be mesh router)9. You can mesh up existing AiMesh routers with WiFi 7 routers. However, while enabling MLO on WiFi might cause compatibility issue with existing AiMesh nodes, If MLO is enabled on AiMesh primary router, the node without MLO will not broadcast 6GHz WiFi. If you want to disable MLO, log in to the ASUS router settings page, go to [Wireless] > [MLO], and click [Enable MLO] to disable this feature (enabled by default). Please refer to FAQ [Wi-Fi 7 Wireless Router] What is MLO (Multi-Link Operation) and how it worksIf you are using an Ethernet backhaul1. Check if you are using a CAT 5e/CAT 6 cable. If your cable does not support Gigabit or the cable is almost worn out, we suggest you replace it. Please refer to the FAQ [Wireless Router] How to check the wired connection speed and network cable specifications for ASUS Wireless Router?2. If you use a switch to connect your AiMesh devices, please check if the cable and switch both offer Gigabit Ethernet speed. Note: ASUS wireless routers have different features depending on the model, before using this feature, please refer to the product specification page to confirm that your router supports the above features.3. Try to reset your AiMesh system to default and manual set up and see if issue persist. Please stay in default setting and do not import a pre-saved setting file to prevent any possible connection issue.4. Please try to switch the role of mesh router and mesh node then try again. (Mesh router to be mesh node, mesh node to be mesh router)You can refer to FAQ for router reset.How to get the (Utility / Firmware)?You can download the latest drivers, software, firmware and user manuals in theASUS Download Center.If you need more information about theASUS Download Center, please refer thislink. AiMesh connects multiple compatible ASUS routers to create a whole-home mesh WiFi network. The flexible and scalable technology lets you mix different AiMesh-compatible routers, and add new ones at any time to improve coverage.* All devices in an AiMesh network enjoy access to all the features of the main router, including gaming features, AiProtection commercial-grade security and more. Most ASUS routers already support AiMesh. *AiMesh supports the 802.11k/v standard. Asus may not be the first brand name that comes to mind when you think of home networking gear. But in 2021, it wins our Readers' Choice award for routers for a tenth straight year. It's the first brand you should consider when upgrading your home networking setup.-PCMag Learn more about ASUS routers RT-AX92U 2 Pack won the best mesh router for gaming-PC Gamer Learn more about RT-AX92U 2 Pack ASUS ZenWiFi AX (XT8) was named Best WiFi 6 Mesh System-CNET Learn more about ASUS ZenWiFi AX (XT8) AiMesh is designed to be fast and reliable, for worry-free WiFi. You can enjoy seamless connections anywhere, without switching to different networks, and the AiMesh network can still deliver an internet connection even if one node is down. Seamless Roaming Self-Healing Network Intelligent Band Switching AiMesh can create a single, house-wide network name so theres no need to constantly switch between networks as you roam around your home. AiMesh keeps an eye on the signal strength to your device, and switches it seamlessly to another source if necessary. If you prefer separate network names for each frequency band, you can do that as well AiMesh is designed to work the way you want! If theres a disruption on any part of AiMesh network, self-healing capability immediately replaces a failed router using the remaining router connections. So your connection will not be disrupted and you dont even notice a thing. Nodes are joined by a backhaul connection, and a stable backhaul ensures the reliability of the whole network. AiMesh detects the connection quality of each frequency band and intelligently chooses the best band for backhaul: 5 GHz, 2.4 GHz or even the new WiFi 6E 6 GHz band. It will also automatically switch to another band if the current backhaul band becomes congested. Standalone routers usually offer the best possible performance and features, and theyre unbeatable when used in an AiMesh system. An AiMesh system using two ROG Rapture GT-AXE11000 WiFi 6E routers can deliver 6X-faster throughput than rival WiFi 6 mesh systems.* *Based on ASUS lab tests. Learn more about WiFi 6E AiMesh WiFi 6E Mesh System An AiMesh system can be easily managed via the ASUS Router app or the web interface. You can check connectivity, graphically monitor traffic, and customize settings with a simple click or tap. Running an AiMesh network is truly hassle-free. There's an easy one-tap shortcut in the ASUS Router app to optimize the AiMesh topology that is, the connections between the main router and each node. An optimized topology ensures that each node is connected to the main router via the shortest route, delivering fast and stable connections across your entire home. AiMesh Network Topology Node Connection Information With the intuitive user interface, it's easy to see at a glance the configuration of your flexible AiMesh network as it expands. You can instantly see how many nodes are connected and how many devices are connected to each node. Click on any node to instantly see its backhaul connection quality, data transmission rate or more detailed information. If the connections poor, ASUS provides multiple ways to fix it, including one-click optimization, backhaul connection prioritization, and more. For custom configurations, the ASUS Router app and web interface have powerful tools that let you change system parameters, backhaul type, or node settings. It's a truly professional tool for anyone who wants fully-tailored network settings. Full Backhaul Options Flexible Updates Node Customized Settings AiMesh provides multiple backhaul customization options. For wireless backhaul, you can manually choose the preferred uplink band for each node, including the new 6 GHz WiFi 6E* band. On some tri-band models you can even assign a dedicated band just for backhaul. For wired backhaul, AiMesh allows Ethernet connections for single nodes or for the entire network, which enables ultrafast throughput from the 10G and 2.5G LAN ports available on some premium ASUS routers. The choice is yours! * Only available on WiFi 6E routers. It's easy to make configuration changes to the entire AiMesh system at once including firmware updates, rebooting or resetting or perform operations on each node separately. Even when you're out of the house, you can still fix any home internet issues by remotely configuring either the whole system or individual nodes. Each node can be configured separately, including link aggregation, USB applications, WiFi radio, LED light control and other advanced customizations. You can also manually choose a suitable uplink connection for each node via PreferredUplink AP. ADVANTAGES AiMesh WiFi System Ordinary Mesh System Traditional Performance Router Easy installation Seamless roaming Wider coverage (single node) Powerful performance Rich features AiMesh connects multiple compatible ASUS routers to create a whole-home mesh WiFi network. The flexible and scalable technology lets you mix different AiMesh-compatible routers, and add new ones at any time to improve coverage.* All devices in an AiMesh network enjoy access to all the features of the main router, including gaming features, AiProtection commercial-grade security and more. Most ASUS routers already support AiMesh. *AiMesh supports the 802.11k/v standard. Asus may not be the first brand name that comes to mind when you think of home networking gear. But in 2021, it wins our Readers' Choice award for routers for a tenth straight year. It's the first brand you should consider when upgrading your home networking setup.-PCMag Learn more about ASUS routers RT-AX92U 2 Pack won the best mesh router for gaming-PC Gamer Learn more about RT-AX92U 2 Pack ASUS ZenWiFi AX (XT8) was named Best WiFi 6 Mesh System-CNET Learn more about ASUS ZenWiFi AX (XT8) AiMesh is designed to be fast and reliable, for worry-free WiFi. You can enjoy seamless connections anywhere, without switching to different networks, and the AiMesh network can still deliver an internet connection even if one node is down. Seamless Roaming Self-Healing Network Intelligent Band Switching AiMesh can create a single, house-wide network name so theres no need to constantly switch between networks as you roam around your home. AiMesh keeps an eye on the signal strength to your device, and switches it seamlessly to another source if necessary. If you prefer separate network names for each frequency band, you can do that as well AiMesh is designed to work the way you want! If theres a disruption on any part of AiMesh network, self-healing capability immediately replaces a failed router using the remaining router connections. So your connection will not be disrupted and you dont even notice a thing. Nodes are joined by a backhaul connection, and a stable backhaul ensures the reliability of the whole network. AiMesh detects the connection quality of each frequency band and intelligently chooses the best band for backhaul: 5 GHz, 2.4 GHz or even the new WiFi 6E 6 GHz band. It will also automatically switch to another band if the current backhaul band becomes congested. Standalone routers usually offer the best possible performance and features, and theyre unbeatable when used in an AiMesh system. An AiMesh system using two ROG Rapture GT-AXE11000 WiFi 6E routers can deliver 6X-faster throughput than rival WiFi 6 mesh systems.* *Based on ASUS lab tests. Learn more about WiFi 6E AiMesh WiFi 6E Mesh System An AiMesh system can be easily managed via the ASUS Router app or the web interface. You can check connectivity, graphically monitor traffic, and customize settings with a simple click or tap. Running an AiMesh network is truly hassle-free. There's an easy one-tap shortcut in the ASUS Router app to optimize the AiMesh topology that is, the connections between the main router and each node. An optimized topology ensures that each node is connected to the main router via the shortest route, delivering fast and stable connections across your entire home. AiMesh Network Topology Node Connection Information With the intuitive user interface, it's easy to see at a glance the configuration of your flexible AiMesh network as it expands. You can instantly see how many nodes are connected and how many devices are connected to each node. Click on any node to instantly see its backhaul connection quality, data transmission rate or more detailed information. If the connections poor, ASUS provides multiple ways to fix it, including one-click optimization, backhaul connection prioritization, and more. For custom configurations, the ASUS Router app and web interface have powerful tools that let you change system parameters, backhaul type, or node settings. It's a truly professional tool for anyone who wants fully-tailored network settings. Full Backhaul Options Flexible Updates Node Customized Settings AiMesh provides multiple backhaul customization options. For wireless backhaul, you can manually choose the preferred uplink band for each node, including the new 6 GHz WiFi 6E* band. On some tri-band models you can even assign a dedicated band just for backhaul. For wired backhaul, AiMesh allows Ethernet connections for single nodes or for the entire network, which enables ultrafast throughput from the 10G and 2.5G LAN ports available on some premium ASUS routers. The choice is yours! * Only available on WiFi 6E routers. It's easy to make configuration changes to the entire AiMesh system at once including firmware updates, rebooting or resetting or perform operations on each node separately. Even when you're out of the house, you can still fix any home internet issues by remotely configuring either the whole system or individual nodes. Each node can be configured separately, including link aggregation, USB applications, WiFi radio, LED light control and other advanced customizations. You can also manually choose a suitable uplink connection for each node via PreferredUplink AP. ADVANTAGES AiMesh WiFi System Ordinary Mesh System Traditional Performance Router Easy installation Seamless roaming Wider coverage (single node) Powerful performance Rich features [AiMesh2.0] AiMesh 2.0 Web GUI - Introduction Part of AiMesh supported models now support a brand new AiMesh management page, which empowers users with more mesh network information and centralized system settings. Please see below for details.Note:Please upgrade your firmware version later than3.0.0.4_386.4xxxx.For the information of how to upgrade firmware, please refertoHow to update the firmware of your router to the latest version ? (WebGUI)AiMesh Network TopologyThis network topology display your current AiMesh connection.1. Model name2.Location icon of your AiMesh device : This helps you to identify different AiMesh devices in your environment.3. AiMesh nodes uplink connection quality : The system will automatically detect your connection status and will provide the connection quality as shown in the picture below. 4. Location of your AiMesh device : This helps you to identify different AiMesh devices in your environment.5. Number of the connected device : It shows how many online connected devices6. [Add AiMesh node] button : Once you click on the button, the system will search for any available devices in your environment.AiMesh Device InformationClick on one of the AiMesh devices in the Topology, it will display the corresponding system information, including your AiMesh model name, MAC address, location, firmware version, and uplink connection quality.ClientsClick on [Clients], it will display the connected online device list with detailed information. The offline client devices will turn grey.Network InformationClicking on [Network Information] will display your WAN information, backhaul, and fronthaul information.*Backhaul network is for the connection between AiMesh router and node(s).*Fronthaul network is for the connection of end devices.AiMesh router-Network InformationAiMesh node-Network InformationAiMesh node ManagementClick on [Management] to control the functions of a specific AiMesh device as shown below. The functions listed will vary based on different models.1. LED On/Off Switch Button2. Backhaul Connection Priority(Only for AiMesh node)Auto: The system will automatically change its connection type based on the real-word connection quality.Ethernet: The connection between your AiMesh node and router will only be Ethernet.3. USB Application(Only for AiMesh node): Media Server /Samba / FTPTime Machine On/OffDownload Master Only AiMesh router and AiMesh node with firmware higher than 3.0.0.4.386.xxxxx can support to use the below USB function. Please be noted that both AiMesh router and AiMesh node need to upgrade to 3.0.0.4.386.xxxxx firmware.4. Switch Control: Go to LAN > Switch Control, setting AiMesh node [Jumbo Frame] (The default is disable)5. Optimization6. Reboot AiMesh node7. Remove AiMesh nodeHow to get the (Utility / Firmware)?You can download the latest drivers, software, firmware and user manuals in theASUS Download Center.If you need more information about theASUS Download Center, please refer thislink. 0.0 out of 5 stars. TUF Gaming VG32UQA1A Gaming Monitor 32 inch (31.5 inch viewable) 4K (3840 x 2160), Overclock to 160Hz (above 144Hz), ELMB Sync, Freesync Premium, 1ms (MPRT), Variable Overdrive, 120% sRGB, DisplayHDR 400 0.0 out of 5 stars. TUF Gaming VG27VQM Curved Gaming Monitor 27 inch Full HD (1920x1080), 240Hz, Extreme Low Motion Blur, Adaptive-sync, Freesync Premium, 1ms (MPRT) 0.0 out of 5 stars. TUF Gaming VG28UQL1A HDMI 2.1 Gaming Monitor 28-inch 4K UHD (3840 x 2160), Fast IPS, 144 Hz, 1 ms GTG, NVIDIA G-Sync compatible, AMD FreeSync Premium, DSC, ELMB Sync, Variable Overdrive, DisplayHDR 400, DCI-P3 90% 0.0 out of 5 stars. TUF Gaming VG289Q Gaming Monitor 28 inch UHD 4K (3840x2160), IPS, DCI-P3 , Adaptive-Sync, FreeSync, HDR 10 0.0 out of 5 stars. ASUS CG32UQ HDR Console Gaming Monitor 32 inch 4K (3840x2160), Halo Sync, FreeSync, DisplayHDR 600, DCI-P3 95%, GameFast, Remote Control Hi I am happy to be able to move from an apartment to a 4 floor villa.I have an asus rt-ax86u router, which I'm extremely satisfied with, but it's not enough to cover the entire area of the new house.The house doesn't have an ethernet network, so I'm going to buy a pack of 2x rt-ax92u and make an aimesh network.Knowing that the modem is on the ground floor, that I have a PS5 in the basement, and that I have a gaming computer on the top floor, what is the best configuration? Which one should be the main router? ThanksNuno I would set AX86U as main router (the faster hardware device), 2x AX92U as nodes with dedicated AX backhaul, the gaming computer wired to one of the nodes. AX92U is a tri-radio router, but with one AX radio only. If this radio is used as dedicated wireless backhaul, the other AC radio is available to clients. It should be enough - still can push 500Mbps over Wi-Fi to common 2-stream clients. For increased stability and reliability I would use 80MHz wide non-DFS channels for both wireless backhaul and clients, if possible (region specific).The best AiMesh is with all the same model routers running the same firmware and with wired backhaul. Try to run wires for best results. Last edited: Mar 14, 2022 Main - Ubiquiti UCG-Ultra, 2x USW-Ultra, 2x UX, 4x U6-MeshExperimental - Asuswrt-Merlin, OpenWrt, pfSense, OPNsense I would set AX86U as main router (the faster hardware device), 2x AX92U as nodes with dedicated AX backhaul, the gaming computer wired to one of the nodes. AX92U is a tri-radio router, but with one AX radio only. If this radio is used as dedicated wireless backhaul, the other AC radio is available to clients. It should be enough - still can push 500Mbps over Wi-Fi to common 2-stream clients. 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Doesn't setting the wired backhaul up negate AiMesh though? I thought AiMesh was just wireless.I'm new to ASUS and still learning their stuff (for example, should have bought other things than the XT8 for merlin support...) HP ML310e Gen 8 - opnsense Cisco 3560g - core Asus XT8's for wifi TP-Link TL-SG2008 for access switches I thought AiMesh was just wireless. AiMesh works wired and wireless. AiMesh is a marketing name of wired access points or wireless repeaters with central, but very limited management. should have bought other things than the XT8 Based on user feedback on this forum, XT8 is not the best Asus product. You don't really "need" Asuswrt-Merlin firmware. It's optional, for extra features. Main - Ubiquiti UCG