



Communication Solutions for the New Zealand Forestry Industry

Digital communications technologies are
right at home in our forests

Digital Radio Network powered by **tait**

Tait Innovation and Forestry in New Zealand

Tait portable and mobile radios have been used in almost every commercial forest across New Zealand and remain the most trusted communications tool across the local forestry industry.



Tait Communications launched its mobile radio in the 1970s, and New Zealand's forestry sector quickly found that the flexibility of Tait's network and mobile and portable radio range were ideally suited to the dynamic and challenging forest environment. Fast forward to today and Tait innovation is still at the forefront of mobile network developments as demonstrated by the introduction of the Tait digital network.

Digital technology not only connects multiple work groups within the forest environment but also enables communications outside the forest with external contractors, head office and freight and logistics operators. Processing, administrative and exporting functions can all be incorporated. The network now carries not just voice but also digital data, enabling the seamless integration of workflows throughout the entire growing and harvesting process.

The forestry industry demands more than just product

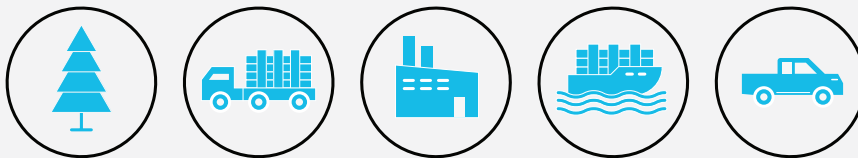
Local Manufacturing

All Tait products supplied to the forestry industry are designed and manufactured in New Zealand. By talking directly to Tait designers, the industry has the opportunity to influence the design of new products and services.

Local Support

It's important for forestry operators or contractors to have support within their local community. Tait products are serviced by a local dealer, accredited service centre or by Tait. There is no need to send product outside of New Zealand for servicing.

NZ FORESTRY INDUSTRY



Proven Experience

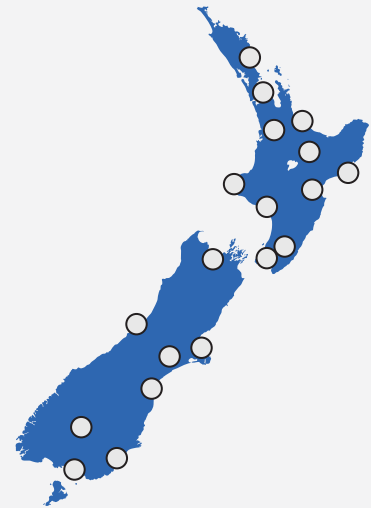
For over 40 years Tait products have proven their performance in New Zealand forests and industry feedback has added to the development of new features within the Tait product range.

Product Innovation

Product innovation is important. Tait products and services are no longer just about voice services. Tait have a number of innovative features and services to meet the evolving needs of the New Zealand forestry industry.

Your local dealer has you covered

Alcom Communications are located in Rotorua and service customers across the Bay of Plenty, many in the Forestry sector.



Vernon Douglas
Alcom Communications, Rotorua

“Ensuring workers’ safety, while also maintaining productivity is a key aim for all forestry operators.

The Alcom Connect Digital Radio Network has been developed with this in mind and offers significant advantages over a traditional analogue system including; crystal Clear Voice communications, a Greater Coverage area and Advanced Encryption Technology ensuring increased call Security and Privacy.

Another popular advantage of a digital radio network, is its ability to be programmed with a wide range of features and functions, effectively offering a fully integrated welfare monitoring system tailored to your businesses specific requirements.

The feedback from businesses already using Alcom Connect is overwhelmingly positive. So, get in touch and book a demo in our show room.”

Introducing Alcom Connect

The Alcom Connect network is a brand new tailored radio network providing coverage and service where existing phone and network provision is inadequate.

It has been deployed across the forestry and rural areas covering Rotorua/Kaingaroa, Gisborne/East Coast and Napier regions.

It’s an innovative, cost-effective and flexible solution for improved health & safety and business effectiveness.

Tait Tier 3 digital VHF trunked radio technology and IP linking are used to deliver high quality voice communication and a range of other features which enhance health & safety and operational effectiveness.



MADE FOR FORESTRY

The power of an intelligent digital radio network

Alcom Connect Digital Radio Network creates one large and scalable network to provide both local and wide area communications for forestry contractors and operators.



Dual microphone

Clear digital audio

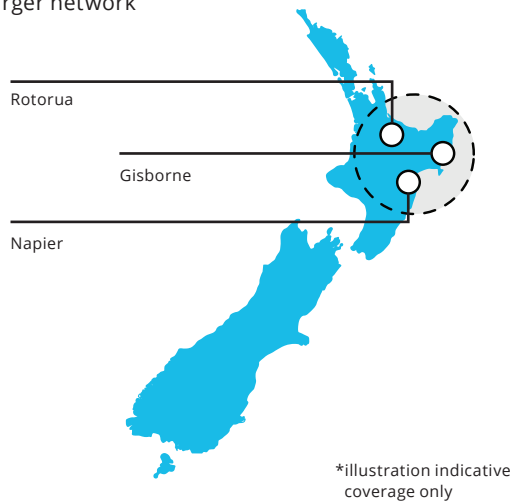
Alcom Connect and purpose-built hand portables and mobiles offer clear voice communications. Voice clarity is maintained when transmitted over multiple links, covering multiple forests.

Tait hand portables now offer two microphones. When operated in noisy environments the dual microphone capability actively suppress ambient noise, to ensure high quality speech.

The dual microphone capability also improves voice clarity when operating on analogue forestry channels. Whether you're operating on a new digital forestry network or an existing analogue forestry channel, you can be assured of clear speech.

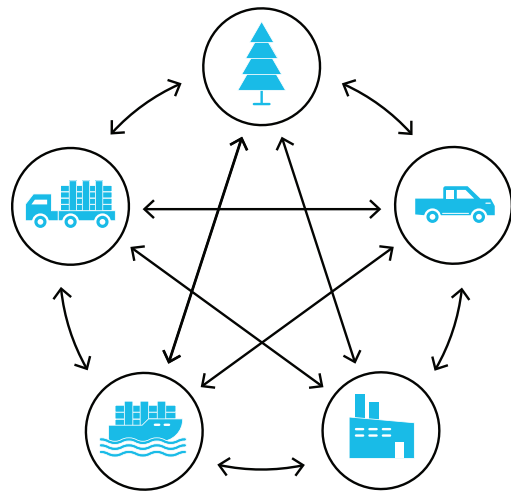
Regional Coverage

Regional forests are connected to create one larger network



Linked Work Groups

Intelligent call management allows simultaneous calls from the one site



Wide area multi-regional coverage

Alcom Connect links with other regional networks located around the central North Island. Digital forestry networks can link multiple forestry sites across a wide area.

- + At each site the local digital network offers multiple voice channels
- + Multiple regions are linked to provide wide area coverage

A good example of linking regions is with what has been built to cover the wider East Coast region. This forestry network has now been linked to two other networks within the Bay of Plenty and the Hawkes Bay. Forestry contractors and operators can now talk across these networks without changing channel.

Intelligent call management

A forestry worker on an analogue forestry channel will lock out other users while talking to another user.

Alcom Connect intelligently links work groups across a wide area and can carry out private conversations across the network without locking out other work groups. The network dynamically allocates channels to the required work group member.

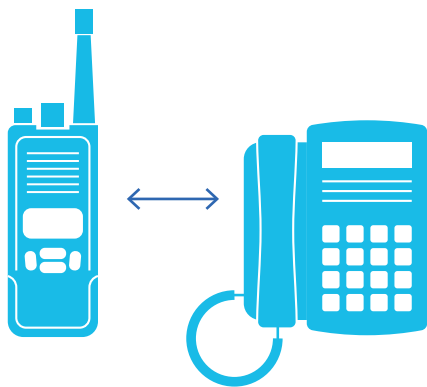
Having at least three channels at each site allows different work groups to make calls simultaneously.

The Alcom Connect Digital Radio Network offers a wide range of voice services

Telephone access

Alcom Connect offers telephone access from within and outside of the forest. Telephone access ensures your work groups can connect whether they are using a Tait digital radio or not. Users within the forest can dial a telephone number from their Tait digital radio (call duration may be limited by local network operator). The Tait network allows users to call either a landline or cellular mobile.

Office based team members are also able to call a Tait digital radio within the forest from their landline or cellular mobile. In this case, individual telephone numbers are allocated to specific digital radio users.



Emergency calling

Alcom Connect offers a wide range of emergency calling options.

An emergency call can be set up to call either a dedicated radio or dedicated group of radios. When the emergency call is activated, the radios receiving the emergency call are sent both a visual and audible notification of the event.

Even if the forestry worker in distress is unable to push the PTT on the side of the radio, once the emergency call is set up, the receiving radios can still hear the worker in distress and talk back to them – this is achieved by the radio automatically cycling between transmit and receive.

All emergency call events can also be sent to staff outside of the forest, whether they have a Tait digital radio or cellular mobile – please see the following section on Assisting with Health and Safety within the forest.

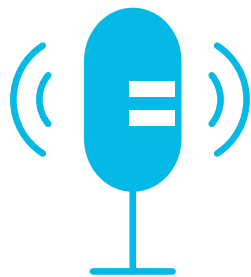


Voice recording

Alcom Connect allows operators and single contractors to record all voice communications throughout the day. The recording and storage of the team's communications during the day can be used for either training or as an audit tool in the case of an emergency event.

Voice recordings to be either stored on board the Tait digital radio, using a black box style feature (Tait Unified Vehicle), or sent directly to the cloud and stored off site in real time (Logic Connect).

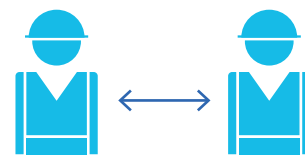
All recorded voice will be time and date stamped. The recordings can also identify the radio user and current location.



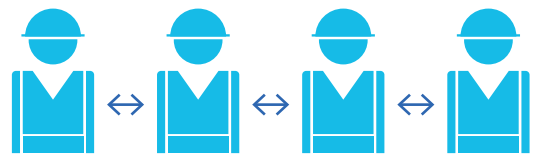
Call privacy

Alcom Connect provides complete call privacy when needed. The Alcom Connect digital network provides privacy for all calling across the network:

- + One to one calling between radios - Individual calls
- + Group calling - nominate specific users to belong to a specific group
- + Broadcast calling - call across all groups within the network
- + Calling between different contractors and forestry operators
- + Calling to landlines and cellular mobiles



One to one privacy

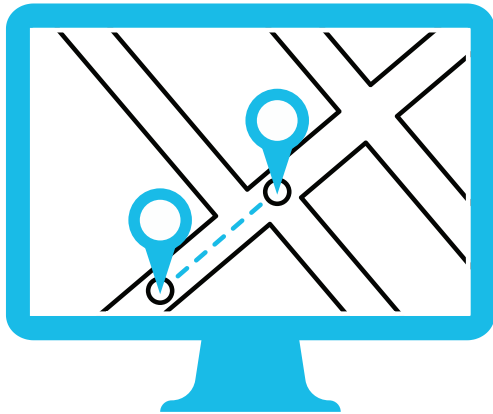


Group call privacy

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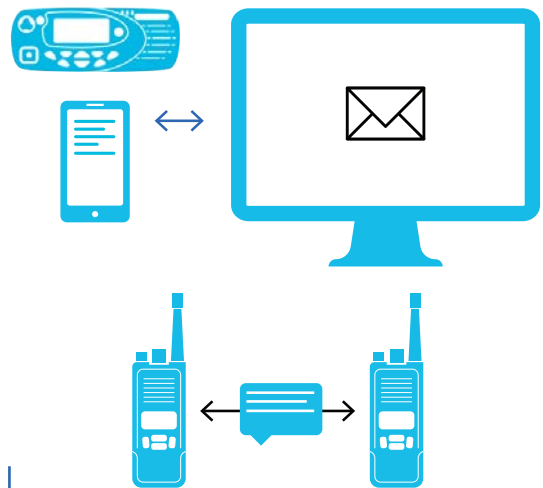
Digital offers a wide range of GPS services

A digital network offers more than just voice communication. Tait's wide range of GPS and messaging features can help with both worker safety and productivity.



GPS Services

All Tait digital radios are GPS capable with the addition of a GPS antenna or software upgrade. Tait GPS services can operate over the digital forestry network without needing to connect via the cellular network. Tait GPS services can be set up to enable you to pinpoint the location of a team member within the forest at any time or to alert a team member when they are entering a dangerous area. With the addition of a Tait Axiom ancillary, Tait GPS services can also operate over the cellular network when traveling between forestry blocks. The Tait Axiom services can operate anywhere there is cellular coverage in addition to communication between forestry blocks.



Messaging & Data Services

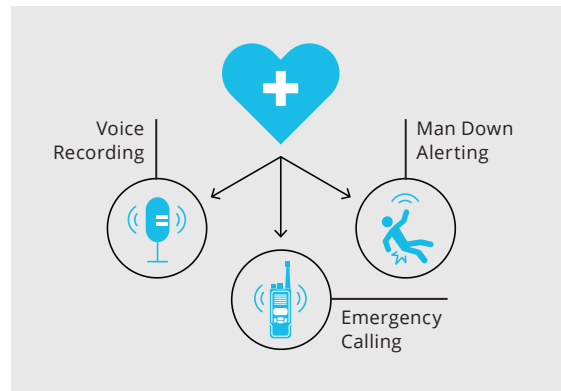
Alcom Connect makes a wide range of messaging and data services available to forestry operators and contractors. Messaging between individual radio users or groups is immediate. Using Tait Axiom, a forestry crew member can send forms-based data securely over the digital network to a listed email address. Examples of uses for this service include to confirm forestry stocks, detail a parts list to be sent out or submit a team member's timesheet.

Assisting with Health and Safety

Integrated Health and Safety Event Management

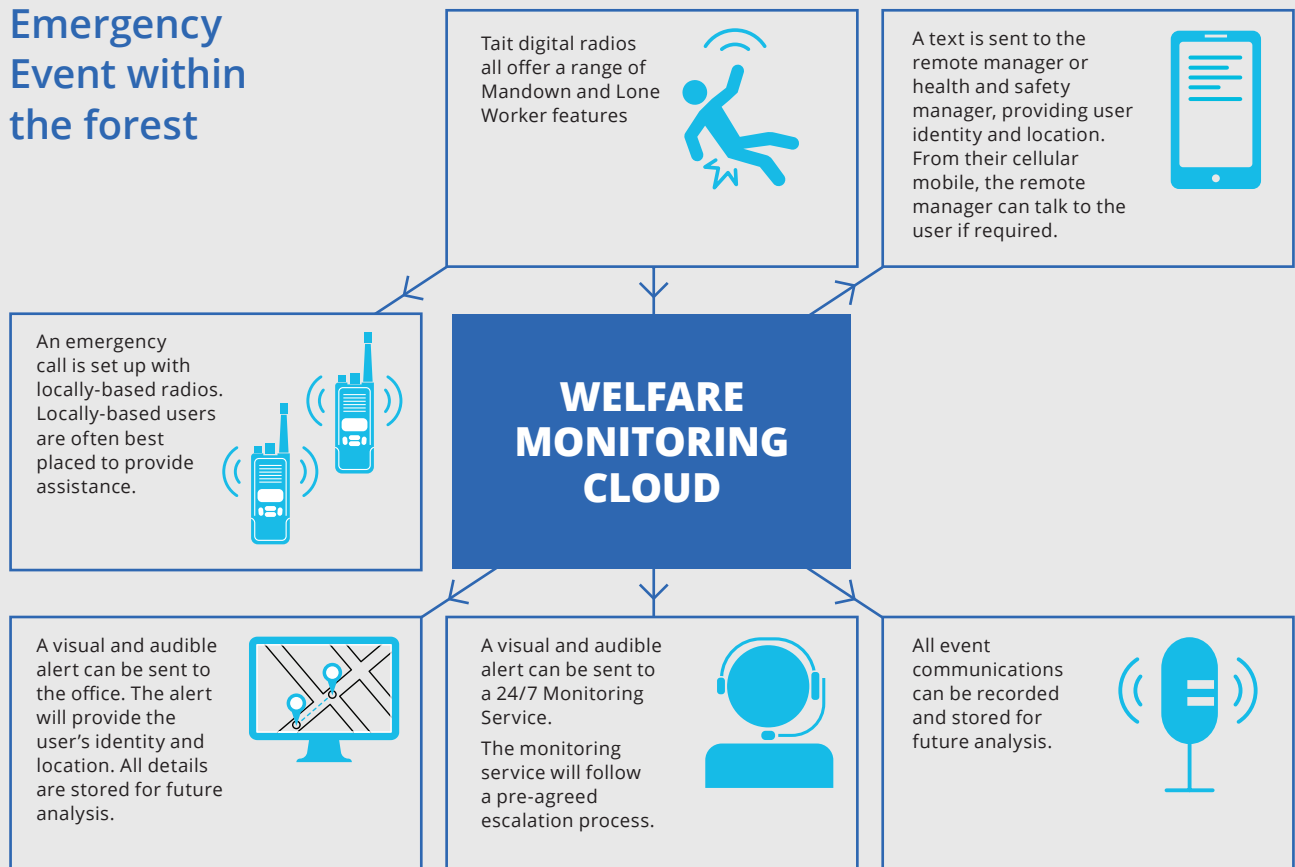
Alcom Connect offers a variety of features to assist with the health and safety of forestry crews working in the forest and when moving between forestry blocks. These health and safety features ensure that when there is an emergency event, the network can transmit an alert to a wide range of co-workers, remote workers, management team members and third-party monitoring services. This system ensures the worker needing assistance can receive it as quickly as possible from the people best placed to react.

Once the team member has received the assistance



they need, the digital network also offers the ability for health and safety professionals to review how the event was managed.

Emergency Event within the forest



tait AXIOM

Cellular integration and connectivity

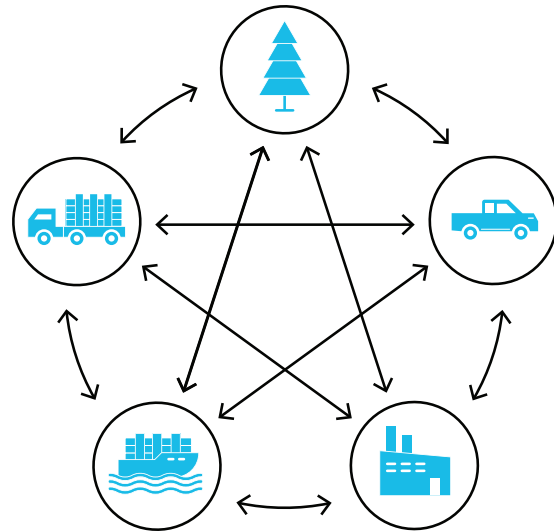
Keep your teams and contractors connected within and outside the forest

Tait understands that a modern forestry operation requires more than just voice services. Tait Axoim range of services means you can integrate

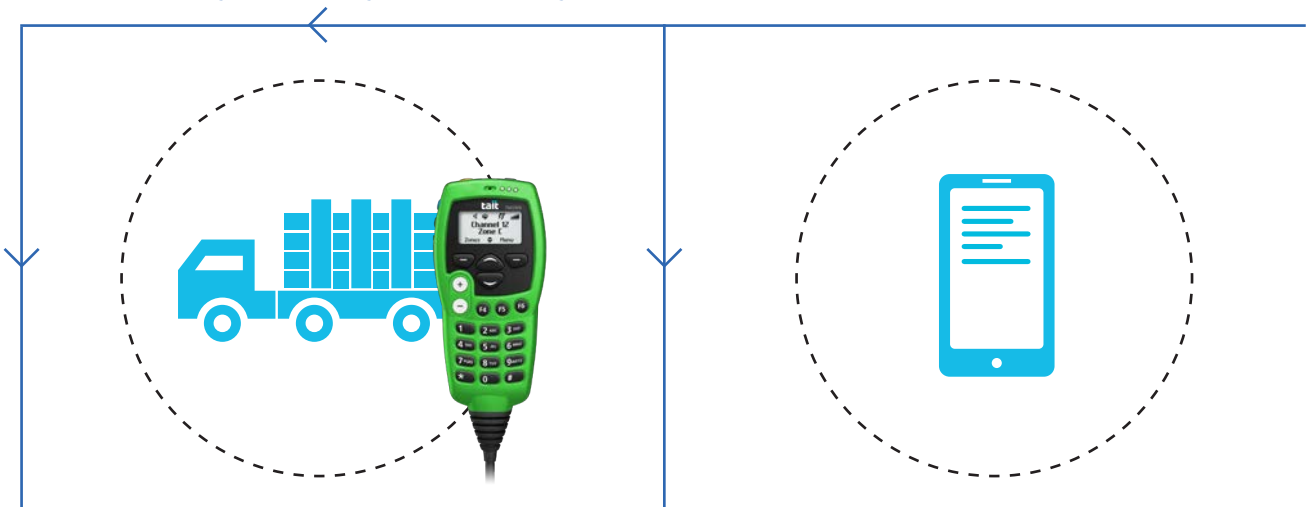
cellular services, smartphones, tablets, WiFi, IP and data capabilities into your digital forestry network.

Increase the size of your forestry network exponentially

By adding Axiom services, users from within the forest can communicate with any Tait Axiom equipped device or application outside the forest. Whether your worksite is within the Bay of Plenty or Nelson, the team have the ability to connect to ports, processing plants and other contractors anywhere within New Zealand. A Tait Axiom mobile allows users to drive outside of the forestry network footprint and still maintain contact with their teammates. Likewise, when a forestry team member is away from their Tait digital radio, the Tait Axiom PTTToX smartphone application allows them to stay in touch with the team still working within the forest.



Tait Axiom links your forestry network to any cellular network



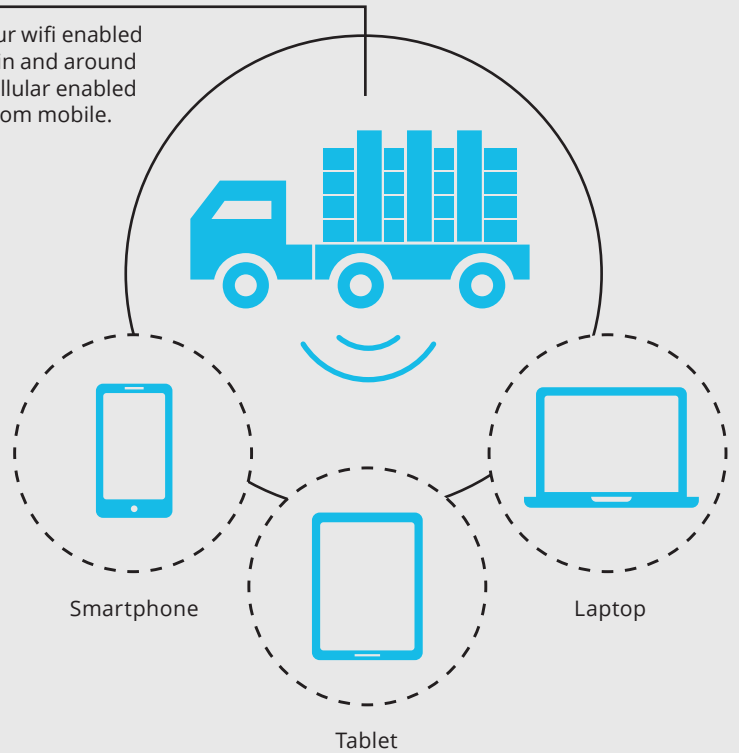
Tait Axiom mobile roams in and out from your forestry network to the cellular network.

Tait Axiom's PTTToX smartphone application allows you to stay connected to your teammates within the forest.

Tait Axiom increases your cellular coverage in and around the forest

A Tait Axiom mobile offers an integrated Tait digital radio and cellular modem package. The Tait Axiom mobile uses a dual purpose cellular / Wifi antenna to provide users in the vicinity of forestry vehicles with improved cellular connectivity. When there is no cellular coverage a Tait Axiom mobile can still send small packets of critical data from your smart device or laptop over the digital network, improving your connectivity to the outside world.

Use your wifi enabled device in and around your cellular enabled Tait Axiom mobile.



Remote – over the air programming

When operating on a Alcom Connect digital forestry network there is no need to drive back to your nearest service centre if you need a programming change to your radio. OTAP, or over the air programming, is provided by the network. OTAP works over the digital forestry network, cellular* or WiFi*.

Tait's OTAP function allows for a variety of changes to be made to your radio while you are within the forest or travelling to your next job. Examples of these changes are the ability to:

- + Add talk groups
- + Add or change the address book list
- + Add or change analogue channels

When using Tait Axiom, you can also update firmware or smart applications.



*Requires the addition of a Tait Axiom ancillary.

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