**Patch Release Note**

# Patch 86222-10
# For Rapier Switches and AR800 Series Modular Switching Routers

## Introduction

This patch release note lists the issues addressed and enhancements made in patch 86222-10 for Software Release 2.2.2 on existing models of Rapier L3 managed switches and AR800 Series L3 modular switching routers. Patch file details are listed in Table 1.

**Table 1: Patch file details for Patch 86222-10.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 29-Nov-2001 |
| **Compressed Patch File Name** | 86222-10.paz |
| **Compressed Patch File Size** | 295536 bytes |

This release note should be read in conjunction with the following documents:

■ Release Note: Software Release 2.2.2 for Rapier Switches, AR300 and AR700 Series Routers, and AR800 Series Modular Switching Routers (Document Number C613-10313-00 Rev A) available from *www.alliedtelesyn.co.nz/documentation/documentation.html*.

■ Rapier Switch Documentation Set for Software Release 2.2.1 available on the Documentation and Tools CD-ROM packaged with your switch, or from *www.alliedtelesyn.co.nz/documentation/documentation.html*.

■ AR800 Series Modular Switching Router Documentation Set for Software Release 2.2.1 available on the Documentation and Tools CD-ROM packaged with your switching router, or from *www.alliedtelesyn.co.nz/documentation/documentation.html*.

⚠️ *WARNING: Using a patch for a different model or software release may cause unpredictable results, including disruption to the network. Information in this release note is subject to change without notice and does not represent a commitment on the part of Allied Telesyn International. While every effort has been made to ensure that the information contained within this document and the features and changes described are accurate, Allied Telesyn International can not accept any type of liability for errors in, or omissions arising from the use of this information.*

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**PCR: 01264        Module: SWI                          Network affecting: No**

Some switch chip register settings have been optimised to improve the provision of CoS with the newer revision of switching silicon.

# Features in 86222-09

Patch file details for Patch 86222-09 are listed in Table 2.

**Table 2: Patch file details for Patch 86222-09.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 27-Nov-2001 |
| **Compressed Patch File Name** | 86222-09.paz |
| **Compressed Patch File Size** | 295444 bytes |

Patch 86222-09 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

**PCR: 01189        Module: STP, SWI                          Network affecting: Yes**

A new feature, STP forwarding, has been added. STP forwarding can be enabled and disabled using the commands:

```
ENABLE SWI STPFORWARD
DISABLE SWI STPFORWARD
```

When STP forwarding is enabled, all STP forwarding is ignored and all BDPUs received on a port are forwarded on all other ports.

**PCR: 01242        Module: CORE, SNMP                          Network affecting: No**

The switch now delays sending link traps immediately after a restart to give the link to the trap host time to come up. A similar change has been made for the cold start trap. After a 10s delay, all interfaces which are UP have a link trap generated for them. After that, link traps are sent as normal.

**PCR: 01244        Module: SWI, CORE, IPG                          Network affecting: No**

Processing invalid UDP packets caused a memory leak. This issue has been resolved. Additional debugging facilities were added.

**PCR: 01246        Module: SWI                          Network affecting: No**

The default setting for the switch port parameter INFILTERING is now OFF, as specified in IEEE802.1Q. A VLAN will still reject these packets if they are not from valid VLAN member ports.

**PCR: 01247        Module: IPG                          Network affecting: No**

The IGMP snooping forwarding process now correctly selects outgoing ports when DVMRP is managing the multicast routing information.

**PCR: 01248**      **Module: SWI**                    **Network affecting: No**

A configuration problem prevented trunking of gigabit ports at 100Mbit speeds. This issue has been resolved. The A39 gigabit copper uplink reverted to autonegotiation after a restart, even if it was configured to a fixed speed. This issue has been resolved. When the port has been configured for a fixed speed, the mode is now set to MDIX, not MDI.

**PCR: 01254**      **Module: PRI**                    **Network affecting: No**

When an M2 version of the AR020 PRI E1/T1 PIC was installed in a AR040 NSM it was not possible to select the T1 mode of operation regardless of the jumper setting. This issue has been resolved.

**PCR: 01256**      **Module: Firewall**                **Network affecting: No**

A fatal error occurred when the firewall discarded disallowed multicast packets. This issue has been resolved.

# Features in 86222-08

Patch file details for Patch 86222-08 are listed in Table 3.

**Table 3: Patch file details for Patch 86222-08.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 09-Nov-2001 |
| **Compressed Patch File Name** | 86222-08.paz |
| **Compressed Patch File Size** | 291012 bytes |

Patch 86222-08 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

**PCR: 01201**      **Module: L2TP**                    **Network affecting: Yes**

Tunnel creation failed when attempting to establish a point-to-point tunnel from an ATR router (tunnel originator) to another vendor's router. This issue has been resolved.

**PCR: 01233**      **Module: PIM**                     **Network affecting: No**

When IGMP snooping was enabled, if a member left a group on a port, it could not re-join the group on that port. This issue has been resolved.

Substantial changes have been made to PIM in more recent code releases. These have been retrofitted to 2-2-2 in the patch. Note: these changes have incorporated PCRs 01159 and 01190.

**PCR: 01236**      **Module: PPP**                     **Network affecting: No**

The PPPoE access concentrator did not stop RADIUS accounting when a PADT termination was received without receiving a proper PPP termination first. This issue has been resolved.

PCR: 01237        Module: SWI                              Network affecting: No

   The dot1dBridge MIB implementation now complies with RFC1493.


# Features in 86222-07

Patch file details for Patch 86222-07 are listed in Table 4:

**Table 4: Patch file details for Patch 86222-07**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 26-Oct-2001 |
| **Compressed Patch File Name** | 86222-07.paz |
| **Compressed Patch File Size** | 250468 bytes |

Patch 86222-07 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

PCR: 01018        Module: DHCP                              Network affecting: No

   DHCP now correctly handles request messages containing request list options not supported by the router.

PCR: 01160        Module: IPG,FIREWALL        Network affecting: No

   The router would accept TCP sessions with destination address the same as the subnet broadcast address for one of the router's interfaces. Firewall-generated packets destined for a subnet broadcast address on one of the routers interfaces would cause a fatal error. These issues have been resolved.

PCR: 01168        Module: HTTP                              Network affecting: No

   A watchdog timout occurred when the router received an HTTP message with an over-length header. Normal HTTP requests would also occasionally cause watchdog timeouts. These issues have been resolved.

PCR: 01182        Module: OSPF                              Network affecting: No

   The OSPF route filter was not filtering out external routes. This issue has been resolved.

PCR: 01193        Module: IPG                               Network affecting: No

   MD5 Authentication now works correctly with RIP packets.

PCR: 01194        Module: L2TP, IPG                     Network affecting: No

   The SET IP LOCAL command caused a fatal error if the router was configured with a default route over an L2TP tunnel, because there was no valid route to the remote IP address of the tunnel. This issue has been resolved.

**PCR: 01197**       **Module: Q931**                **Network affecting: No**

Debug messages are no longer generated when a Q.931 Advise of Charge Notification message is received.

**PCR: 01198**       **Module: TCP**                **Network affecting: No**

TCP sessions would get stuck in the FINWAIT2 state if the remote host did not send a FIN message when required. The router now starts a timer when a TCP session enters the FINWAIT2 state and will automatically close the session if the timer expires.

**PCR: 01199**       **Module: IPG**                **Network affecting: No**

The SET IP FILTER command was not correctly handling the ICMPTYPE and ICMPCODE parameters. This issue has been resolved.

**PCR: 01202**       **Module: DHCP**                **Network affecting: No**

The router will now accept DHCP messages that are greater than or equal to 576 bytes in size, and reject any message smaller than 576 bytes. This operation conforms to RFC 1541.

**PCR: 01203**       **Module: ISAKMP**                **Network affecting: No**

ISAKMP quick mode exchanges are now committed if any traffic is received over the newly generated SA. This improves stability in very lossy networks where the commit message may get lost.

**PCR: 01204**       **Module: ISAKMP**                **Network affecting: No**

ISAKMP debugging caused a fatal error when the debugging mode was set to ALL and PFS was enabled. This issue has been resolved.

**PCR: 01205**       **Module: PPP**                **Network affecting: No**

PPPoE interfaces with IDLE set to ON would not retry active discovery when more data was received if active discovery had previously failed. This issue has been resolved.

**PCR: 01206**       **Module: ISAKMP**                **Network affecting: No**

A memory loss occurred when certificates were used by ISAKMP. This issue has been resolved.

**PCR: 01207**       **Module: ISAKMP**                **Network affecting: No**

ISAKMP heartbeats are no longer transmitted if the lower layer interface is down. This stops ISAKMP heartbeats from bringing up links in dial-up environments.

**PCR: 01209**       **Module: ISAKMP**                **Network affecting: No**

In some conditions it was possible for ISAKMP packets to be lost and not retransmitted. Incoming ISAKMP messages are now validated before stopping retransmission of the previous message.

**PCR: 01211**       **Module: SWI**                **Network affecting: No**

The COS_DST bit on ARL for L3 interface should be 0x4 (higher priority) for CPU ports. This has been corrected.

**PCR: 01213** **Module: TRG, SNMP** **Network affecting: No**

The Trigger Facility was generating a trap with variable { 0 0 }, and was not documented in the ATI enterprise MIB. This issue has been resolved. The MIB object *triggerLastTriggerActivated* ({ enterprises(1) alliedTelesyn(207) mibObjects(8) brouterMib(4) atrouter(4) modules(4) trigger(53) 1 }) has been defined, to record the trigger number of the last trigger activated, and this variable is now transmitted in the trigger activation trap *triggerTrap*.

**PCR: 01214** **Module: SWI** **Network affecting: No**

In a Rapier G6, fitted with a fibre uplink module with all ports active, switching traffic between port 1 and the uplink caused the traffic flow to cease after a period of time depending on the volume of traffic. This issue has been resolved.

**PCR: 01216** **Module: STP** **Network affecting: No**

The Rapier did not include the message age of the received BDPU message in the message age of the BDPU it transmitted. Also, the message age of the message transmitted BDPU could be less than that of the received BDPU, which contravenes IEEE 802.3d. This issue has been resolved.

**PCR: 01219** **Module: VLAN,SWI** **Network affecting: No**

Reception of incorrectly tagged packets was causing corruption of the ARL table, eventually causing the switch to lock up. This issue has been resolved. Tagged packets with invalid VLAN identifiers are now discarded. The INFILTERING parameter of the SET SWITCH PORT command now defaults to ON.

**PCR: 01221** **Module: SWI** **Network affecting: No**

Flow control performance has been improved.

**PCR: 01225** **Module: IPSEC** **Network affecting: No**

The IPsec SA ID now wraps correctly at the 16 bit (ID = 65535) boundary. The ID is also checked to verify that it is free before it is used.

**PCR: 01227** **Module: PPP** **Network affecting: No**

If PPPoE AC services were not deleted in the same order they were added, the DELETE command would return an " operation successful" message but the service would still appear in the output of the SHOW PPP PPPOE command. This issued has been resolved.

**PCR: 01229** **Module: SWI** **Network affecting: No**

The CREATE CONFIG command did not include all required L3FILTER parameters in the generated script file.

**PCR: 01232** **Module: SWI** **Network affecting: No**

The L3 table on the Rapier G6 is now cleared when a switch port goes down to ensure the L3 and ARP tables are consistent.

**PCR: 01234**      **Module: SWI**            **Network affecting: No**

A switch port that was transmitting STP BPDUs and also mirroring its transmit traffic to the mirror port caused a fatal error. This issue has been resolved.

# Features in 86222-06

Patch file details for Patch 86222-06 are listed in Table 5.

**Table 5: Patch file details for Patch 86222-06.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 30-Aug-2001 |
| **Compressed Patch File Name** | 86222-06.paz |
| **Compressed Patch File Size** | 226776 bytes |

Patch 86222-06 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

**PCR: 01188**      **Module: SWI**            **Network affecting: No**

The power supply voltages of the base board PHYs on a Rapier G6 are controlled by a PHY register value, which was incorrectly set. This issue has been resolved.

**PCR: 01190**      **Module: PIM**            **Network affecting: No**

In PIM Dense Mode, if a data stream started before PIM hello messages were exchanged, the receiver did not get the data stream. This issue has been resolved.

**PCR: 01192**      **Module: SWI**            **Network affecting: No**

The Rapier G6 base ports sometimes experienced spurious link up or link down events. This issue has been resolved.

# Features in 86222-05

Patch file details for Patch 86222-05 are listed in Table 6.

**Table 6: Patch file details for Patch 86222-05.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 24-Aug-2001 |
| **Compressed Patch File Name** | 86222-05.paz |
| **Compressed Patch File Size** | 223728 bytes |

Patch 86222-05 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

**PCR: 01148**          **Module: SWI**                              **Network affecting: No**

A39 copper uplink modules in the Rapier G6 sometimes experienced spurious link up or link down events. This issue has been resolved.

**PCR: 01157**          **Module: CORE**                             **Network affecting: No**

The enterprise MIB now supports objects for power supply monitoring.

**PCR: 01162**          **Module: PKI**                              **Network affecting: No**

Certificates containing *GeneralisedTime* with the year in YYYY format are now parsed correctly. The *keyUsage* field of certificates is now parsed correctly when only one byte has been specified. The *CRL update time* is now displayed correctly in hours. If the *username* and *password* parameters are present the *location* parameter must be present and appear before the *username* and *password* parameters. Certificates with signatures of 257 bytes are now correctly parsed. Certificates added from a configuration script are now processed correctly.

**PCR: 01170**          **Module: IPv6**                             **Network affecting: No**

A fatal error occurred if an IPv6 interface was deleted while packets were being transmitted. The number of current interfaces was not being updated correctly when a new IPv6 interface was added. As a result, after multiple additions and deletions, no more IPv6 interfaces could be added. These issues have been resolved.

**PCR: 01176**          **Module: PKI**                              **Network affecting: No**

The CREATE CONFIG command now adds PKI certificates to the script in the same order that they were originally added to the certificate database.

**PCR: 01177**          **Module: PKI**                              **Network affecting: No**

PKI certificates are now periodically checked (once per hour) to verify that they are still valid.

**PCR: 01178**          **Module: IPSEC**                            **Network affecting: No**

IPCOMP SA's which have the reserved CPI "3" are no longer deleted by ISAKMP delete messages.

**PCR: 01179**          **Module: SWI**                              **Network affecting: No**

When a VLAN was created and then destroyed on the G6 or G6F, the VTABLE was corrupted. This has been fixed.

**PCR: 01181**          **Module: DHCP**                             **Network affecting: No**

DHCP failed to send request messages when it was in a rebinding or renewing state. This issue has been resolved.

**PCR: 01185**          **Module: SWI**                              **Network affecting: No**

In some extreme traffic conditions the switch could lock up, preventing switching of any traffic. This issue has been resolved.

**PCR: 01186     Module: FIREWALL     Network affecting: No**

When large numbers of sessions were being handled the firewall would become overly aggressive in restricting new sessions. The *Active TCP Opens* field in the output of the SHOW FIREWALL POLICY would show a very high number ($42 \times 10^8$). This issue has been resolved.

**PCR: 01187     Module: IPG     Network affecting: No**

If the IGMP table was empty and a timeout was set, a fatal error occurred. This issue has been resolved.

# Features in 86222-04

Patch file details for Patch 86222-04 are listed in Table 7.

**Table 7: Patch file details for Patch 86222-04.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 24-Aug-2001 |
| **Compressed Patch File Name** | 86222-04.paz |
| **Compressed Patch File Size** | 220220 bytes |

Patch 86222-04 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

**PCR: 01124     Module: PKI     Network affecting: No**

Message protection validation failures would occur intermittently. This issue has been resolved.

**PCR: 01136     Module: ISAKMP     Network affecting: No**

ISAKMP now interoperates with other vendor's products in aggressive mode exchanges.

**PCR 01138     Module: CORE, SWI     Network affecting: No**

Support has been added for the 8624XL-80 switch with -48VDC power supply.

**PCR: 01152     Module: FIREWALL     Network affecting: No**

In a dual policy configuration, the firewall would lock up under load. The firewall would also mistakenly report SYN attacks. These issues have been resolved.

**PCR: 01159     Module: PIM     Network affecting: No**

The CREATE CONFIG command generated duplicate PIM interface configuration command lines. This issue has been resolved.

**PCR: 01162     Module: PKI     Network affecting: No**

Certificates containing *GeneralisedTime* with the year in YYYY format are now parsed correctly. The *keyUsage* field of certificates is now parsed

correctly when only one byte has been specified. The *CRL update time* is now displayed correctly in hours. If the *username* and *password* parameters are present the *location* parameter must be present and appear before the *username* and *password* parameters.

**PCR: 01165**      **Module: DHCP**           **Network affecting: No**

The DHCP server now correctly allocates addresses to clients running Apple Open Transport 2.5.1 or 2.5.2.

**PCR: 01166**      **Module: FIREWALL**        **Network affecting: No**

Both public and private access could be configured on the same interface on a policy. This issue has been resolved.

**PCR: 01167**      **Module: ENCO**           **Network affecting: No**

RSA encryption is now periodically suspended to ensure other processes get some CPU time during large RSA calculations.

**PCR: 01169**      **Module: ISAKMP**        **Network affecting: No**

The CREATE ISAKMP command now checks that the key specified by the LOCALRSAKEY parameter actually exists in the ENCO module.

**PCR: 01171**      **Module: ETH, TRIGGER**     **Network affecting: No**

The INTERFACE parameter of the CREATE TRIGGER and SET TRIGGER commands now supports Ethernet interfaces. Ethernet interface events can now generate triggers.

**PCR: 01173**      **Module: Telnet**         **Network affecting: No**

The Telnet server's listen port can now be configured to a number in the range 1 to 65535, excluding any ports already assigned as listen ports.

**PCR: 01174**      **Module: Firewall**        **Network affecting: No**

The CREATE CONFIG command sometimes generated scripts for rule commands with GBLIP=0.0.0.0 when this was not necessary. This issue has been resolved.

# Features in 86222-03

Patch file details for Patch 86222-03 are listed in Table 8.

**Table 8: Patch file details for Patch 86222-03.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 8-Aug-2001 |
| **Compressed Patch File Name** | 86222-03.paz |
| **Compressed Patch File Size** | 205828 bytes |

Patch 86222-03 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

PCR: 01112      Module: IPG                    Network affecting: No

DNS response packets with corrupt length fields were causing a fatal error. This issue has been resolved.

PCR: 01139      Module: IPG                    Network Affecting: No

IP NAT caused a fatal error when an ARP wait timer timed out and tried to send a host unreachable message. This issue has been resolved.

PCR: 01147      Module: STT                    Network affecting: No

The router was restarting after a "teardrop" attack on the STT listen port. This issue has been resolved.

PCR: 01150      Module: FIREWALL               Network affecting: No

The entry aging process now works correctly even when there are large numbers of firewall entries to be aged.

PCR: 01153      Module: IPG                    Network affecting: No

The command SHOW IP DEBUG=$n$ was entered, where $n$ was one greater than the number of items in the IP debug queue resulted in a fatal error. This issue has been resolved.

# Features in 86222-02

Patch file details for Patch 86222-02 are listed in Table 9.

**Table 9: Patch file details for Patch 86222-06.**

| Base Software Release File | 86s-222.rez |
|---|---|
| Patch Release Date | 26-Jul-2001 |
| Compressed Patch File Name | 86222-02.paz |
| Compressed Patch File Size | 202564 bytes |

Patch 86222-02 includes all issues resolved and enhancements released in previous patches for Software Release 2.2.2, and the following enhancements:

PCR: 01081      Module: FIREWALL               Network affecting: No

When an interface on the firewall was configured with a global IP address of 0.0.0.0, outgoing packets from the private interface to the public interface sometimes caused a fatal error. This issue has been resolved.

PCR: 01126      Module: PKI                    Network affecting: No

Re-validation of temporary CA certificates now works correctly.

PCR: 01128      Module: IPG                    Network affecting: No

A fatal error occurred when IGMP received a *Join* message and attempted to forward the *Join* message to other switch ports. This issue has been resolved.

**PCR: 01131          Module: CORE                    Network affecting: No**

The SHOW CPU command sometimes displayed incorrect CPU utilisation figures. Typically a value of about 74% was reported when in fact the CPU was almost idle. This issue has been resolved.

**PCR: 01134          Module: GUI                      Network affecting: No**

Port parameters can now be set correctly using the Layer 3 Switch GUI.

**PCR: 01135          Module: GUI,INST                 Network affecting: No**

Clicking the *Apply* button on a Layer 3 Switch GUI page caused the switch to lock up if no configuration file was set, but boot.cfg was present. This issue has been resolved.

**PCR: 01137          Module: IPG                      Network affecting: No**

A fatal error occurred when UDP received a packet with very long UDP packet length. This issue has been resolved.

# Features in 86222-01

Patch file details for Patch 86222-01 are listed in Table 10.

**Table 10: Patch file details for Patch 86222-01.**

| | |
|---|---|
| **Base Software Release File** | 86s-222.rez |
| **Patch Release Date** | 11-Jul-2001 |
| **Compressed Patch File Name** | 86222-01.paz |
| **Compressed Patch File Size** | 187124 bytes |

Patch 86222-01 includes the following enhancement for Software Release 2.2.2:

**PCR: 01100          Module: DHCP                     Network affecting: No**

The DHCP server identified the wrong port numbers for incoming DHCP requests causing DHCP replies to be sent to the wrong port. This issued has been resolved.

**PCR: 01102          Module: IPG                      Network affecting: No**

The IP flow cache occasionally generated a watchdog fatal error. This issued has been resolved.

**PCR: 01102          Module: SWI                      Network affecting: No**

Deleting entries from an L3 table occasionally resulted in a watchdog fatal error. This issued has been resolved.

**PCR: 01106          Module: PKI                      Network affecting: No**

PKI enrolment no longer causes message validation to fail.

**PCR: 01119**      **Module: IPV6**             **Network affecting: No**

Repeated addition and deletion of an address with the VALID parameter set to or from an IPV6 interface caused a fatal error. This issue has been corrected. The VALID parameter specifies the life of the address, and defaults to INFINITE. The address is deleted when the lifetime expires. The PREF parameter specifies the time that the address is the preferred address of the interface, and defaults to INFINITE. PREF must be less than or equal to VALID. IPV6 now checks and ensures that if either PREF or VALID is specified, PREF is less than or equal to VALID. When an address is deleted the timers are now correctly cleared.

**PCR: 01120**      **Module: IPG**             **Network affecting: No**

IP sometimes passed the wrong port number to PIM, causing PIM to process the wrong port number in its routing table. This issued has been resolved.

# Availability

Patches can be downloaded from the Software Updates area of the Allied Telesyn web site at *www.alliedtelesyn.co.nz/support/updates/patches.html*. A licence or password is not required to use a patch.

Free Manuals Download Website

[http://myh66.com](http://myh66.com)

[http://usermanuals.us](http://usermanuals.us)

[http://www.somanuals.com](http://www.somanuals.com)

[http://www.4manuals.cc](http://www.4manuals.cc)

[http://www.manual-lib.com](http://www.manual-lib.com)

[http://www.404manual.com](http://www.404manual.com)

[http://www.luxmanual.com](http://www.luxmanual.com)

[http://aubethermostatmanual.com](http://aubethermostatmanual.com)

Golf course search by state

[http://golfingnear.com](http://golfingnear.com)

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[http://emailbydomain.com](http://emailbydomain.com)

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