CA SYSVIEW Performance Management 16.0
CA RS 2101 Service List

Service	Description	Type
SO13275	CTSPOOLS SHOWS INCORRECT CONNECTED STATUS	PTF
SO15790	JVM PROBLEMS WHEN MONITORED BY JVM DATA COLLECTOR AGENT	*HIP/PRP*
SO16018	NEW Z/OS CONNECT ENTERPRISE EDITION MONITORING	PTF
The CA RS 2101 service count for this release is 3		

FMID	Service	Description	Type
CNM4G00	SO13275	CTSPOOLS SHOWS INCORRECT CONNECTED STATUS	PTF
	SO15790	JVM PROBLEMS WHEN MONITORED BY JVM DATA COLLECTOR AGENT	*HIP/PRP*
	SO16018	NEW Z/OS CONNECT ENTERPRISE EDITION MONITORING	PTF
The CA RS 2101 service count for this FMID is 3			

Service	Details
SO13275	SO13275 M.C.S. ENTRIES = ++PTF (SO13275) CTSPOOLS SHOWS INCORRECT CONNECTED STATUS PROBLEM DESCRIPTION: The CTSPOOLS command will under some circumstances show a CONNECTED status for disconnected CICS Temporary Storage Pools. SYMPTOMS: The CTSPOOLS display will show the correct number of 'Pools connected' in the info area, but the entries for some pools will show CONNECTED status when not connected. IMPACT: Connection status of a CTSPOOL may be incorrect. CIRCUMVENTION: None. PRODUCT(S) AFFECTED: CA SYSVIEW Release 15.0 CA SYSVIEW Release 16.0 Related Problem: SYSVW 2514 Copyright (C) 2020 CA. All rights reserved. R00103-NM4160-SP0 DESC(CTSPOOLS SHOWS INCORRECT CONNECTED STATUS). ++VER (Z038) FMID (CNM4G00) PRE (SO12816) SUP (ST13275) ++HOLD (SO13275) SYSTEM FMID(CNM4G00) REASON (RESTART) DATE (20343) COMMENT (+----------+----------+ | CA SYSVIEW PERFORMANCE MANAGEMENT Version 16.0 | +----------+----------+ |SEQUENCE | Before Accept | +----------+----------+ |PURPOSE | To implement the fix. | +----------+----------+ |USERS | All users of SYSVIEW for CICS. | |AFFECTED | | +----------+----------+ |KNOWLEDGE | Product Administration | |REQUIRED | CICS Systems Programming | +----------+----------+ |ACCESS | Product libraries | |REQUIRED | Ability to run SYSVIEW for CICS transactions | +----------+----------+ ********** * STEPS TO PERFORM * ********** Apply this fix and either recycle the CICS region, or use the GSVT (terminate) and GSVS (start) transactions to recycle SYSVIEW for CICS within the CICS region.).

Service	Details
SO15790	SO15790 M.C.S. ENTRIES = ++PTF (SO15790) JVM PROBLEMS WHEN MONITORED BY JVM DATA COLLECTOR AGENT PROBLEM DESCRIPTION: The SYSVIEW JVM Data Collector Agent encounters an error condition which may affect the JVM the Agent is monitoring. The error condition may result in the following problems: o The JVM in which the SYSVIEW JVM Data Collector Agent is monitoring may behave unpredictably, or hang. o The address space in which the JVM is running that is being monitored by the SYSVIEW JVM Data Collector Agent may behave unpredictably, or hang. For example, a CICS region can run one or more JVMs. Not only are the JVMs susceptible to a problem, but the entire address space susceptible if the application utilizes Pause Elements. Examples of applications that may be affected (not comprehensive): o JZOS Applications o CICS JVM Servers o Apache Tomcat Servers o z/OS Connect o The SYSVIEW JVM Data Collector Agent may hang. The cause of the problem is that the SYSVIEW JVM Data Collector Agent encountered return code 56 (x38) from the IBM z/OS Pause Element IEAVAPE service, which means the address space Pause Element limit has been reached. There is a limit of unauthorized Pause Elements allowed by an address space, which is 2040. After the limit has been reached no more unauthorized Pause Elements may be allocated. This will result in any future requests by the JVM, address space, or the SYSVIEW JVM Data Collector Agent to fail. Depending on the applications reliance on Pause Elements, varying and unpredictable problems may occur. SYMPTOMS: An address space with a JVM that is also running the SYSVIEW JVM Data Collector Agent may hang, abend, or experience unpredictable problems. IMPACT: Potential outage to JVM based applications or address spaces that contains JVMs. It is recommended to stop the SYSVIEW JVM Data Collector Agent until this fix is applied. To dynamically stop a SYSVIEW JVM Data Collector Agent without recycling a JVM, use the STOP line command on the JVMLIST command on each monitored JVM. To prevent a JVM Data Collector Agent from starting when a JVM is started, the -agentpath option of the JVM needs modified or removed. See the "Configure the JVM Data Collector Agent" page on the SYSVIEW Tech Docs Portal for more information. CIRCUMVENTION: None. It is recommended to stop the SYSVIEW JVM Data Collector Agent until this fix is applied. To dynamically stop a SYSVIEW JVM Data Collector Agent without recycling a JVM, use the STOP line command on the JVMLIST command on each monitored JVM. To prevent a JVM Data Collector Agent from starting when a JVM is started, the -agentpath option of the JVM needs modified or removed. See

Service	Details
	the "Configure the JVM Data Collector Agent" page on the SYSVIEW Tech Docs Portal for more information. PRODUCT(S) AFFECTED: CA SYSVIEW Release 15.0 CA SYSVIEW Release 16.0 Related Problem: SYSVW 2569 Copyright (C) 2020 CA. All rights reserved. R00161-NM4160-SP0 DESC(JVM PROBLEMS WHEN MONITORED BY JVM DATA COLLECTOR AGENT). ++VER (Z038) FMID (CNM4G00) PRE (SO08681 SO09059 SO09589 SO09844 SO10269 SO10316 SO10680 SO11028 SO11632 SO11875 SO12347 SO12629 SO12816 SO13072 SO13116 SO13187 SO13538 SO14533 SO15546) SUP (AS10269 BS12816 HC08481 SO10411 SO13612 ST10411 ST13612 ST15790) ++HOLD (SO15790) SYSTEM FMID(CNM4G00) REASON (RESTART) DATE (20352) COMMENT (+----------+ | CA SYSVIEW PERFORMANCE MANAGEMENT Version 16.0 | +----------+----------+ |SEQUENCE | After Apply | +----------+----------+ |PURPOSE | To implement the fix | +----------+----------+ |USERS | All users of SYSVIEW | |AFFECTED | | +----------+----------+ |KNOWLEDGE | Product Administration | |REQUIRED | | +----------+----------+ |ACCESS | Product libraries | |REQUIRED | | +----------+----------+ ********** * STEPS TO PERFORM * ********** If you do not use the JVM component then this HOLD can be ignored. After applying this PTF, the JVM data collector agent run-time binaries will need to be deployed to your site's run-time environment, followed by a stop and start of your JVMs. Follow these steps to implement the change: 1. Deploy the agent run-time from the SMP/E managed directory "../cnm4g00/CNM4JVMD/" (DDDEF CNM4JVMD) to the run-time directory "../cnm4g00/runtime/". The deploy can be performed by running the sysviewhlq.SAMPJCL(INST0006) install job. 2. Stop the JVMs configured to run the agent. Note that some address spaces such as CICS can have multiple JVMs. All JVMs in the address space must be stopped at the same time. 3. Start the JVMs configured to run the agent. Notes:

Service	Details
	1. This fix creates an incompatibility between the SYSVIEW STC and the JVM data collector agent. While it is safe not to upgrade the agent binaries immediately, an agent running back-level binaries will be unable to communicate with the SYSVIEW STC. This symptom can be identified on the JVMLIST command's MON column. Any JVM that shows MONX in the MON column is running a mismatched service level. It is recommended to keep the agent in sync with the SYSVIEW STC so the latest features and bug fixes are active in the agent. 2. The following SYSVIEW commands can be used to identify JVMs configured to run an agent that are currently running on a system: JVMARGS SYSTEM ; SELECT ARGUMENT CN -AGENTPATH Ensure all run-time directories are updated with the new binaries.). BINARY LINK('../libgsvoagt1.so') PARM(PATHMODE(0,7,7,5)) . BINARY LINK('../libgsvoagt4.so') PARM(PATHMODE(0,7,7,5)) .

Service	Details
SO16018	SO16018 M.C.S. ENTRIES = ++PTF (SO16018) NEW Z/OS CONNECT ENTERPRISE EDITION MONITORING ENHANCEMENT DESCRIPTION: This feature PTF contains the following enhancements in support of monitoring IBM z/OS Connect Enterprise Edition. CA SYSVIEW supports z/OS Connect EE V3.0 and higher. 1. Enhanced JVM Data Collector Agent. The JVM Data Collector Agent was enhanced to monitor z/OS Connect. The agent is required to be configured in each z/OS Connect instance that is to be monitored. Once the agent is configured, SYSVIEW can display data about the monitored z/OS Connect on several new displays. There are several new z/OS Connect specific options that can be specified when configuring the JVM Data Collector Agent. More information on the new options can be found in the SYSVIEW Tech Docs Portal page titled "JVM Data Collection" under the "z/OS Connect Interceptors" section. 2. New ZCNLIST command. The ZCNLIST command dynamically discovers all z/OS Connect instances on the systems and displays them in a list. Address space level performance information displays for each z/OS Connect instance. In addition, high-level z/OS Connect configuration information is displayed. The ZCNLIST command supports displaying one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 3. New ZCNSET command. The ZCNSET command is a function command that performs administrative functions on a given z/OS Connect instance. For example, the ZCNSET command can start and stop a given API, enable and disable interceptors, and flush pending SMF records from a low activity instance. The ZCNSET command supports performing functions on one or more z/OS Connect instances in the same LPAR and multiple LPARs. 4. New ZCNRLOG command. The ZCNRLOG command displays a log of z/OS Connect request SMF records. Statistics are displayed for each request such as date, time, target URI, elapsed time, etc. Each record can be drilled down into to see a greater level of detailed data. The ZCNRLOG command is designed to be pointed to an SMF log stream. This requires SMF to be writing to log streams, not MAN data sets. Alternatively, the SYSVIEW SMFLOG log stream can capture these SMF records by configuring SMFDATA to log the records. More information on the logging of z/OS Connect SMF records can be found in the SYSVIEW Tech Docs Portal page titled "z/OS Connect SMF Records". 5. New ZCNSOR command. The ZCNSOR command lists all systems of record (SOR) for each z/OS Connect instance. Statistics are displayed for each SOR such as gets, puts, deletes, posts, etc. The ZCNSOR command supports displaying SORs for one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 6. New ZCNURIS command. The ZCNURIS command displays URI information for each z/OS Connect instance. URI statistics are displayed for each instance such as total requests, failed requests, timed out requests, etc. The ZCNURIS command supports displaying one or more z/OS Connect

Service	Details
	instances in the same LPAR and multiple LPARs (XSYSTEM). 7. New ZCNSERV command. The ZCNSERV command lists all services for each z/OS Connect instance. Statistics are displayed for each service such as total requests, failed requests, timed out requests, etc. Line commands are available to start and stop each service. The ZCNSERV command supports displaying services for one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 8. New ZCNAPIS command. The ZCNAPIS command lists all APIs for each z/OS Connect instance. Statistics are displayed for each API such as total requests, failed requests, timed out requests, etc. Line commands are available to start and stop each API. The ZCNAPIS command supports displaying APIs for one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 9. New ZOSCONNECT ASIType. A new ASIType was added to allow various CA SYSVIEW commands to easily identify z/OS Connect address spaces. A new ZOSCONNECT ASIType appears in the ASIType columns on ASLIST and ACTIVITY when a z/OS Connect was identified. 10. New ZCN menu. A new ZCN menu was added. The menu is found under the JVM and JVMLE menus, and contains a new submenu for z/OS connect called ZCN. The new menu can be accessed directly by issuing MENU ZCN. 11. New help topic to assist configuration of JVM Data Collector Agent. A new "How to Configure a JVM Data Collector Agent" help topic was added to the TOPICS command. The topic describes how to configure SYSVIEW's JVM Data Collector Agent, which is required to monitor z/OS Connect. 12. New help topic describing z/OS Connect SMF records. A new "z/OS Connect SMF Records" help topic was added to the TOPICS command. The topic describes the z/OS Connect type 123 SMF record, how to determine if they are being logged, and where they can be viewed. Unrelated to z/OS Connect, but included in this PTF are the following: 1. Updated FTPCA command to warn if FTP is used. The FTPCA command has been updated to warn users about transferring data with unsecure data transport through FTP instead of through more secure SFTP. If a user attempts to use FTP, warning message FTPC023A is displayed urging the user to consider using SFTP. Note, this message is displayed only when the Confirm option is set to YES. There is no change in behavior other than the text of the FTPC023A message changing when FTP is used. 2. New TESTIT command. A new TESTIT command was added for testing/diagnostic purposes and should only be used at the direction of support. PRODUCT(S) AFFECTED: CA SYSVIEW Release 16.0 Related Problem: SYSVW 2567 Copyright (C) 2020 CA. All rights reserved. R00163-NM4160-SP0 DESC(NEW Z/OS CONNECT ENTERPRISE EDITION MONITORING). ++VER (Z038)

Service	Details

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FMID (CNM4G00)
PRE ( SO08681 SO08743 SO08793 SO09059 SO09537 SO09589
SO09844 SO10098 SO10197 SO10269 SO10316 SO10382
SO10497 SO10680 SO10853 SO11028 SO11553 SO11632
SO11642 SO11865 SO11875 SO12125 SO12200 SO12347
SO12629 SO12721 SO12816 SO12880 SO13072 SO13116
SO13187 SO13188 SO13240 SO13538 SO13989 SO14411
SO14533 SO14894 SO15081 SO15210 SO15546 SO15790  )
SUP ( AS10269 BS12816 SO10411 SO12354 SO13612 ST10411
ST12354 ST13612 ST16012 ST16018  )
++HOLD (SO16018) SYSTEM FMID(CNM4G00)
REASON (ENH    )   DATE (20356)
COMMENT (
+-------------------------------------------------------------------------+
|     CA SYSVIEW PERFORMANCE MANAGEMENT               Version 16.0        |
+----------+--------------------------------------------------------------+
|SEQUENCE  | After Apply                                                  |
+----------+--------------------------------------------------------------+
|PURPOSE   | Describe the new features                                    |
+----------+--------------------------------------------------------------+
|USERS     |                                                              |
|AFFECTED  | All users of SYSVIEW                                         |
+----------+--------------------------------------------------------------+
|KNOWLEDGE |                                                              |
|REQUIRED  | Product administration                                       |
+----------+--------------------------------------------------------------+
|ACCESS    |                                                              |
|REQUIRED  | Product libraries                                            |
+----------+--------------------------------------------------------------+
**************************
* STEPS    TO    PERFORM *
**************************
ENHANCEMENT DESCRIPTION:
This feature PTF contains the following enhancements in support of
monitoring IBM z/OS Connect Enterprise Edition. CA SYSVIEW supports
z/OS Connect EE V3.0 and higher.
1. Enhanced JVM Data Collector Agent.
The JVM Data Collector Agent was enhanced to monitor z/OS Connect.
The agent is required to be configured in each z/OS Connect instance
that is to be monitored. Once the agent is configured, SYSVIEW can
display data about the monitored z/OS Connect on several new
displays.
There are several new z/OS Connect specific options that can be
specified when configuring the JVM Data Collector Agent. More
information on the new options can be found in the SYSVIEW Tech Docs
Portal page titled "JVM Data Collection" under the "z/OS Connect
Interceptors" section.
2. New ZCNLIST command.
The ZCNLIST command dynamically discovers all z/OS Connect instances
on the systems and displays them in a list. Address space level
performance information displays for each z/OS Connect instance.
In addition, high-level z/OS Connect configuration information is
displayed. The ZCNLIST command supports displaying one or more z/OS
Connect instances in the same LPAR and multiple LPARs (XSYSTEM).
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Service	Details
	3. New ZCNSET command. The ZCNSET command is a function command that performs administrativ functions on a given z/OS Connect instance. For example, the ZCNSET command can start and stop a given API, enable and disable interceptors, and flush pending SMF records from a low activity instance. The ZCNSET command supports performing functions on one or more z/OS Connect instances in the same LPAR and multiple LPARs. 4. New ZCNRLOG command. The ZCNRLOG command displays a log of z/OS Connect request SMF records. Statistics are displayed for each request such as date, time, target URI, elapsed time, etc. Each record can be drilled down into to see a greater level of detailed data. The ZCNRLOG command is designed to be pointed to an SMF log stream. This requires SMF to be writing to log streams, not MAN data sets. Alternatively, the SYSVIEW SMFLOG log stream can capture these SMF records by configuring SMFDATA to log the records. More information on the logging of z/OS Connect SMF records can be found in the SYSVIEW Tech Docs Portal page titled "z/OS Connect SMF Records". 5. New ZCNSOR command. The ZCNSOR command lists all systems of record (SOR) for each z/OS Connect instance. Statistics are displayed for each SOR such as gets, puts, deletes, posts, etc. The ZCNSOR command supports displaying SORs for one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 6. New ZCNURIS command. The ZCNURIS command displays URI information for each z/OS Connect instance. URI statistics are displayed for each instance such as total requests, failed requests, timed out requests, etc. The ZCNURIS command supports displaying one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 7. New ZCNSERV command. The ZCNSERV command lists all services for each z/OS Connect instance. Statistics are displayed for each service such as total requests, failed requests, timed out requests, etc. Line commands are available to start and stop each service. The ZCNSERV command supports displaying services for one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 8. New ZCNAPIS command. The ZCNAPIS command lists all APIs for each z/OS Connect instance. Statistics are displayed for each API such as total requests, failed requests, timed out requests, etc. Line commands are available to start and stop each API. The ZCNAPIS command supports displaying API for one or more z/OS Connect instances in the same LPAR and multiple LPARs (XSYSTEM). 9. New ZOSCONNECT ASIType. A new ASIType was added to allow various CA SYSVIEW commands to easily identify z/OS Connect address spaces. A new ZOSCONNECT ASIType appears in the ASIType columns on ASLIST and ACTIVITY when a z/OS Connect was identified. 10. New ZCN menu. A new ZCN menu was added. The menu is found under the JVM and JVMLE menus, and contains a new submenu for z/OS connect called ZCN. The new menu can be accessed directly by issuing MENU ZCN. 11. New help topic to assist configuration of JVM Data Collector Agent.

Service	Details
	A new "How to Configure a JVM Data Collector Agent" help topic was added to the TOPICS command. The topic describes how to configure SYSVIEW's JVM Data Collector Agent, which is required to monitor z/OS Connect. 12. New help topic describing z/OS Connect SMF records. A new "z/OS Connect SMF Records" help topic was added to the TOPICS command. The topic describes the z/OS Connect type 123 SMF record, how to determine if they are being logged, and where they can be viewed. Unrelated to z/OS Connect, but included in this PTF are the following: 1. Updated FTPCA command to warn if FTP is used. The FTPCA command has been updated to warn users about transferring data with unsecure data transport through FTP instead of through mor secure SFTP. If a user attempts to use FTP, warning message FTPC023A is displayed urging the user to consider using SFTP. Note, this message is displayed only when the Confirm option is set to YES. There is no change in behavior other than the text of the FTPC023A message changing when FTP is used. 2. New TESTIT command. A new TESTIT command was added for testing/diagnostic purposes and should only be used at the direction of support.). ++HOLD (SO16018) SYSTEM FMID(CNM4G00) REASON (RESTART) DATE (20356) COMMENT (+----------+----------+ | CA SYSVIEW PERFORMANCE MANAGEMENT Version 16.0 | +----------+----------+ |SEQUENCE | After Apply | +----------+----------+ |PURPOSE | To implement the enhancement | +----------+----------+ |USERS | | |AFFECTED | All users of SYSVIEW | +----------+----------+ |KNOWLEDGE | | |REQUIRED | Product Administration | +----------+----------+ |ACCESS | | |REQUIRED | Product libraries | +----------+----------+ ********** * STEPS TO PERFORM * ********** * - ** This Feature PTF requires that the security dataset be refreshed using the security conversion program. 1. Apply the PTF. 2. Deploy the PTF to your run-time libraries. 3. Stop the SYSVIEW STCs, GSSA, and any user sessions. 4. Run Security Conversion JCL contained in CNM4BSAM member GSVUCSEC. 5. Start the SYSVIEW STCs, GSSA, and any user sessions. * - After applying this fix either the CICS region must be recycled to

Service	Details
	pick up the change, or the following steps can be followed to implement the change dynamically: 1. Use the GSVT (terminate) transaction to stop SYSVIEW for CICS in the CICS region. 2. Perform a CICS NEWCOPY for program GSVCGSVS. 3. Use the GSVS (start) transaction to bring SYSVIEW for CICS back up in the CICS region. * - If you do not use the JVM component then this HOLD can be ignored. After applying this PTF, the JVM data collector agent run-time binaries will need to be deployed to your site's run-time environment, followed by a stop and start of your JVMs. Follow these steps to implement the change: 1. Deploy the agent run-time from the SMP/E managed directory "../cnm4g00/CNM4JVMD/" (DDDEF CNM4JVMD) to the run-time directory "../cnm4g00/runtime/". The deploy can be performed by running the sysviewhlq.SAMPJCL(INST0006) install job. 2. Stop the JVMs configured to run the agent. 3. Start the JVMs configured to run the agent. Notes: 1. It is not required to immediately stop and start your JVMs to pick up the updated JVM data collector agent. A back-level agent will continue to communicate with a higher level SYSVIEW STC. It is recommended to keep the agent in sync with the SYSVIEW STC so the latest features and bug fixes are active in the agent. 2. The following SYSVIEW commands can be used to identify JVMs configured to run an agent that are currently running on a system: JVMARGS SYSTEM ; SELECT ARGUMENT CN -AGENTPATH Ensure all run-time directories are updated with the new binaries. * - Apply this fix and refresh LLA. The LOGR subsystem exit (GSVXLGEX) must reside in a linklist data set. If the SYSVIEW loadlib is defined to a linklist data set, then perform an LLA REFRESH. If the SYSVIEW loadlib is not defined to a linklist data set, then the following modules in linklist must be replaced before an LLA REFRESH: GSVXLGEX GSVXLGXG (alias of GSVXLGEX) * -).

Product Family	Product	Release
Systems Management	CA SYSVIEW PERFORMANCE MANAGEMENT	16.00.00

The CA RS 2101 Product/Component Count for this release is 1

CA RS Level	Service	FMID
CAR2101	SO16018	CNM4G00
	SO15790	CNM4G00
	SO13275	CNM4G00
CAR2012	SO15783	CNM4G00
	SO15746	CNM4G00
	SO15546	CNM4G00
	SO15518	CNM4G00
	SO15433	CNM4G00
	SO15374	CNM4G00
CAR2011	SO15474	CNM4G00
	SO15325	CNM4G00
	SO15274	CNM4G00
	SO15212	CNM4G00
	SO15210	CNM4G00
	SO15206	CNM4G00
	SO15081	CNM4G00
	SO15053	CNM4G00
	SO14964	CNM4G00
CAR2010	SO14985	CNM4G00
	SO14921	CNM4G00
	SO14894	CNM4G00
	SO14768	CNM4G00
	SO14761	CNM4G00
	SO14746	CNM4G00
	SO14740	CNM4G00
	SO14696	CNM4G00
CAR2009	SO14661	CNM4G00
	SO14653	CNM4G00
	SO14533	CNM4G00
	SO14487	CNM4G00
	SO14442	CNM4G00
	SO14411	CNM4G00
	SO14363	CNM4G00
	SO14361	CNM4G00
	SO14259	CNM4G00
	SO13364	CNM4G00
	SO13186	CNM4G00
CAR2008	SO14130	CNM4G00
	SO14092	CNM4G00
	SO14004	CNM4G00
	SO13996	CNM4G00
	SO13989	CNM4G00
	SO13984	CNM4G00
	SO13927	CNM4G00
	SO13792	CNM4G00
	SO13701	CNM4G00
	SO13485	CNM4G00

CA RS Level	Service	FMID
	SO13350	CNM4G00
	SO13268	CNM4G00
CAR2007	SO13782	CNM4G00
	SO13779	CNM4G00
	SO13751	CNM4G00
	SO13612	CNM4G00
	SO13538	CNM4G00
	SO13529	CNM4G00
	SO13408	CNM4G00
	SO13188	CNM4G00
CAR2006	SO13276	CNM4G00
	SO13240	CNM4G00
	SO13228	CNM4G00
	SO13187	CNM4G00
	SO13116	CNM4G00
	SO13089	CNM4G00
	SO13072	CNM4G00
	SO13033	CNM4G00
CAR2005	SO12880	CNM4G00
	SO12816	CNM4G00
	SO12773	CNM4G00
	SO12721	CNM4G00
	SO12629	CNM4G00
	SO12625	CNM4G00
	SO12580	CNM4G00
	SO12330	CNM4G00
CAR2004	SO12516	CNM4G00
	SO12474	CNM4G00
	SO12454	CNM4G00
	SO12406	CNM4G00
	SO12401	CNM4G00
	SO12381	CNM4G00
	SO12354	CNM4G00
	SO12347	CNM4G00
	SO12257	CNM4G00
	SO12200	CNM4G00
	SO12163	CNM4G00
CAR2003	SO12125	CNM4G00
	SO12051	CNM4G00
	SO12050	CNM4G00
	SO11959	CNM4G00
	SO11955	CNM4G00
	SO11898	CNM4G00
	SO11891	CNM4G00
	SO11875	CNM4G00
	SO11865	CNM4G00
	SO11762	CNM4G00

CA RS Level	Service	FMID
	SO10411	CNM4G00
CAR2002	SO11830	CNM4G00
	SO11821	CNM4G00
	SO11798	CNM4G00
	SO11683	CNM4G00
	SO11642	CNM4G00
	SO11632	CNM4G00
	SO11553	CNM4G00
	SO11361	CNM4G00
CAR2001	SO11122	CNM4G00
	SO11028	CNM4G00
CAR1912	SO10853	CNM4G00
	SO10849	CNM4G00
	SO10710	CNM4G00
	SO10680	CNM4G00
	SO10649	CNM4G00
	SO10588	CNM4G00
	SO10541	CNM4G00
CAR1911	SO10537	CNM4G00
	SO10497	CNM4G00
	SO10493	CNM4G00
	SO10484	CNM4G00
	SO10421	CNM4G00
	SO10382	CNM4G00
	SO10332	CNM4G00
	SO10326	CNM4G00
	SO10316	CNM4G00
	SO10269	CNM4G00
	SO10214	CNM4G00
	SO10209	CNM4G00
CAR1910	SO10206	CNM4G00
	SO10197	CNM4G00
	SO10143	CNM4G00
	SO10098	CNM4G00
	SO09844	CNM4G00
	SO09632	CNM4G00
CAR1909	SO09772	CNM4G00
	SO09681	CNM4G00
	SO09650	CNM4G00
	SO09607	CNM4G00
	SO09589	CNM4G00
	SO09537	CNM4G00
	SO08894	CNM4G00
CAR1908	SO09287	CNM4G00
	SO09281	CNM4G00
	SO09059	CNM4G00
	SO09013	CNM4G00

CA RS Level	Service	FMID
	SO08793	CNM4G00
CAR1907	SO08895	CNM4G00
	SO08743	CNM4G00
	SO08740	CNM4G00
	SO08698	CNM4G00
	SO08681	CNM4G00
	SO08674	CNM4G00
	SO08553	CNM4G00
	SO08544	CNM4G00
	SO08502	CNM4G00
	SO08485	CNM4G00
	SO08459	CNM4G00
	SO08228	CNM4G00