RDK-V 64bit migration for R-Pi4 Target

Repo Setup:

- repo init -u https://code.rdkcentral.com/r/manifests -b dunfell -m rdkv-nosrc.xml
- repo sync -j `nproc` --no-clone-bundle --no-tags

Build Instructions:

- MACHINE=raspberrypi4-64-rdk-hybrid source meta-cmf-raspberrypi/setup-environment
- bitbake -k rdk-generic-hybrid-wpe-image

Note :

- For Cobalt plugin to work : Refer the Table: Known Issues - Section 2

Machine Configuration and Meta layer changes:

	Meta Layer	Recipe	Change	Code Review	Status
1	meta-cmf-raspberrypi	conf/machine/raspberrypi4-64-rdk-hybrid.conf	New machine configuration added. #@DESCRIPTION: Machine configuration for running a RDK media server (hybrid) on 64bit Raspberry Pi4 #@RDK_FLAVOR: rdkv require conf/machine/raspberrypi4-64.conf MACHINEOVERRIDES .= ":raspberrypi4-64:rpi:hybrid:wpe" # required for image creation MACHINE_IMAGE_NAME = "rdk-generic-hybrid-wpe-image"	https://code.rdkcentral.com/r/c/rdk/components/generic/rdk-oe/meta-cmf-raspberrypi/+/67332	Closed
2	meta-cmf-raspberrypi-restricted			https://code.rdkcentral.com/r/c/components/generic/rdk-oe/meta-cmf-raspberrypi-restricted/+/65911	
		meta-rdk-restricted/recipes-qt/servicemanager/servicemanager_git.bbappend	diff --git a/meta-rdk-restricted/recipes-qt/servicemanager/servicemanager_git.bbappend b/meta-rdk-restricted/recipes-qt/servicemanager/servicemanager_git.bbappend index 42bc222..decd69b 100644 --- a/meta-rdk-restricted/recipes-qt/servicemanager/servicemanager_git.bbappend +++ b/meta-rdk-restricted/recipes-qt/servicemanager/servicemanager_git.bbappend @@ -15,3 +15,4 @@ CXXFLAGS += " -I${QT_INC_BASE_DIR}/QtWidgets" CXXFLAGS += " -I${QT_INC_BASE_DIR}/QtCore" LDFLAGS += " -lQt5OpenGL" +EXTRA_QMAKEVARS_PRE_append_aarch64 += "DEFINES+=ENABLE_RPI_64BIT"	Closed
		meta-rdk-restricted/recipes-extended/recorder/recorder_git.bbappend	diff --git a/meta-rdk-restricted/recipes-extended/recorder/recorder_git.bbappend b/meta-rdk-restricted/recipes-extended/recorder/recorder_git.bbappend index 71aa115..2f1884f 100644 --- a/meta-rdk-restricted/recipes-extended/recorder/recorder_git.bbappend +++ b/meta-rdk-restricted/recipes-extended/recorder/recorder_git.bbappend @@ -1 +1,2 @@ CXXFLAGS += "-DTRH_DISABLE" +PACKAGECONFIG_remove_aarch64 = "ippvclient"	Closed

Errors and Fixes:

	Source File	Error/ Warning	Fix	Code Review	Status
1	dsVideoPort.c	In function 'dsError_t dsGetVideoPort(dsVideoPortType_t, int, int*)' cast from 'VOPHandle_t*' {aka '_VOPHandle_t*'} to 'int' loses precision	Change int -> intptr_t	https://code.rdkcentral.com/r/c/rdk/devices/raspberrypi/devicesettings/+/65451	Closed
2	dsDisplay.c	137:48: error: cast from 'VDISPHandle_t*' {aka '_VDISPHandle_t*'} to 'int' loses precision [-fpermissive] | 137 | *handle = (int)&_handles[m_vType][index];	Change int -> intptr_t	https://code.rdkcentral.com/r/c/rdk/devices/raspberrypi/devicesettings/+/65451	Closed

<table>
<tr><td>3</td><td>dsAudio.c</td><td>cast from 'AOPHandle_t*' {aka '_AOPHandle_t*'} to 'int' loses precision [-fpermissive]

| 162 | *handle = (int)&_handles[type][index];

62:36: error: cast from 'AOPHandle_t*' {aka '_AOPHandle_t*'} to 'int' loses precision [-fpermissive]

| 62 | if ((int)&_handles[index][0] == uHandle) {</td><td>Change int -> intptr_t</td><td>https://code.rdkcentral.com/r/c/rdk/devices/raspberrypi/devicesettings/+/65451</td><td>Closed</td></tr>
<tr><td>4</td><td>git/src/ctrlm_xraudio_hal.c</td><td>130:6: error: conflicting types for 'xraudio_hal_available_devices_get'

| 130 | bool xraudio_hal_available_devices_get(xraudio_devices_input_t *inputs, uint32_t input_qty_max, xraudio_devices_output_t *outputs, size_t output_qty_max) {

| | ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</td><td>./ctrlm_xraudio_hal.c:130:bool xraudio_hal_available_devices_get(xraudio_devices_input_t *inputs, uint32_t input_qty_max, xraudio_devices_output_t *outputs, uint32_t_t output_qty_max)</td><td>https://code.rdkcentral.com/r/c/rdk/components/generic/xraudio-hal_ctrlm/+/67186</td><td>Closed</td></tr>
<tr><td>5</td><td>git/src/bt-ifce/btrCore_dbus_bluez5.c</td><td>| In file included from ../../git/src/bt-ifce/btrCore_dbus_bluez5.c:36:
| ../../git/src/bt-ifce/btrCore_dbus_bluez5.c: In function 'btrCore_BTHandleDusError':
| ../../git/include/logger/btrCore_logger.h:23:25: error: format '%lu' expects argument of type 'long unsigned int', but argument 4 has type 'int' [-Werror=format=]</td><td>BTRCORELOG_DEBUG("Received data is %s with length %d\n", propertyValue, (int) strlen(propertyValue));</td><td>https://code.rdkcentral.com/r/c/rdk/components/generic/bluetooth/+/67187</td><td>Closed</td></tr>
<tr><td>7</td><td>cobalt module</td><td>imizing-move -frtti -fno-exceptions -c ../../cobalt/configuration/configuration.cc -o obj/cobalt/configuration/configuration.configuration.o
| In file included from ../../base/memory/singleton.h:33,
| from ../../cobalt/configuration/configuration.cc:18:
| ../../base/lazy_instance_helpers.h: In instantiation of 'Type* base::subtle::GetOrCreateLazyPointer(base::subtle::AtomicWord*, Type* (*)(void*), void*, void (*)(void*), void*) [with Type = cobalt::configuration::Configuration; base::subtle::AtomicWord = int]':
| ../../base/memory/singleton.h:236:42:   required from 'static Type* base::Singleton<Type, Traits, DifferentiatingType>::get() [with Type = cobalt::configuration::Configuration; Traits = base::LeakySingletonTraits<cobalt::configuration::Configuration>; DifferentiatingType = cobalt::configuration::Configuration]'
| ../../cobalt/configuration/configuration.cc:29:70:   required from here
| ../../base/lazy_instance_helpers.h:83:11: error: cast from 'cobalt::configuration::Configuration*' to 'base::subtle::AtomicWord' {aka 'int'} loses precision [-fpermissive]
| 83 | reinterpret_cast<subtle::AtomicWord>((*creator_func)(creator_arg));
| | ^~~~~~~

 error: unrecognized command line option '-mfpu=neon'
  aarch64-rdk-linux-g++: error: unrecognized command line option '-mfpu=vfpv3'
| aarch64-rdk-linux-g++: error: unrecognized command line option '-mfloat-abi=softfp'
| aarch64-rdk-linux-g++: error: unrecognized command line option '-marm'
| ninja: build stopped: subcommand failed.
 ../../third_party/protobuf/src/google/protobuf/arena.cc:158:113: error: cast from 'google::protobuf::Arena::Block*' to 'google::protobuf::internal::AtomicWord' {aka 'int'} loses precision [-fpermissive]</td><td>removed cobalt module</td><td></td><td>Taken as a sub task. Yet to address

It is removed and merged in the branch and will be reverting in the future and working on it.

REF PLTV-1225 - Jira project doesn't exist or you don't have permission to view it.</td></tr>
<tr><td>8</td><td>src/rmf_sectionfilter.cpp</td><td>../../../../git/qamsource/simgr/inband/./src/rmf_sectionfilter.cpp:641:37: error: cast from 'rmf_sf_SectionRequest_t*' {aka 'rmf_sf_SectionRequest_s*'} to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive]

| 641 | ReleaseFilterRequest((uint32_t) pRequest);

| | ^~~~~~~~

| ../../../../git/qamsource/simgr/inband/./src/rmf_sectionfilter.cpp: In member function 'rmf_Error rmf_SectionFilter::ReleaseFilter(uint32_t)':

| ../../../../git/qamsource/simgr/inband/./src/rmf_sectionfilter.cpp:708:37: error: cast from 'rmf_sf_SectionRequest_t*' {aka 'rmf_sf_SectionRequest_s*'} to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive]

| 708 | ReleaseFilterRequest ((uint32_t)pFilter_Request);</td><td>(rmf_SiServiceHandle)new_si_entry -> (uintptr_t)new_si_entry</td><td>https://code.rdkcentral.com/r/c/components/generic/mediaframework/+/65588</td><td>Closed</td></tr>
</table>

9	./src/rmf_oobsicache.cpp	../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8980:42: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8980 | SetSourceId((rmf_SiServiceHandle)new_si_entry, input_si_entry->source_id); | | ^~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8983:41: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8983 | SetAppType((rmf_SiServiceHandle)new_si_entry, input_si_entry->isAppType); | | ^~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8984:39: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8984 | SetAppId((rmf_SiServiceHandle)new_si_entry, input_si_entry->app_id); | | ^~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8985:49: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8985 | SetActivationTime ((rmf_SiServiceHandle)new_si_entry, input_si_entry->activation_time); | | ^~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8986:47: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8986 | SetChannelNumber((rmf_SiServiceHandle)new_si_entry, input_si_entry->virtual_channel_number, RMF_SI_DEFAULT_CHANNEL_NUMBER); ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5852:71: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5852 | pgm->services->push_back((rmf_SiServiceHandle)new_si_entry); | | ^~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5856:70: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5856 | ts->services->push_back((rmf_SiServiceHandle)new_si_entry); | | ^~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5890:73: error: cast from 'rmf_SiTransportStreamEntry*' to 'rmf_SiTransportStreamHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5890 | new_si_entry->ts_handle = (rmf_SiTransportStreamHandle) ts; | | ^~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5891:62: error: cast from 'rmf_SiProgramInfo*' to 'rmf_SiProgramHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5891 | new_si_entry->program = (rmf_SiProgramHandle)pgm; | | ^~~	change the datatype int -> intptr_t	https://code.rdkcentral.com/r/c/components/generic/mediaframework/+/65588	Closed
10	/usr/src/debug/websocket-ipplayer2-utils/git-r0/git/src/ipp2/RdkLogProvider.cpp	/usr/src/debug/websocket-ipplayer2-utils/git-r0/git/src/ipp2/RdkLogProvider.cpp:34: undefined reference to `rdk_logger_init	Add -lrdkloggers in cmake in *utils source code build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/websocket-ipplayer2-utils/git-r0/git/src/ipp2/ CMakeLists.txt	https://code.rdkcentral.com/r/c/components/generic/websocket-ipplayer2/+/69895	Closed
11	git/src/audioCap/btrMgr_audioCap.c	In file included from ../../../git/src/audioCap/btrMgr_audioCap.c:58: | ../../../git/src/audioCap/btrMgr_audioCap.c: In function 'btrMgr_AC_rmfStatusChangeCb': | ../../../git/include/logger/btrMgr_logger.h:23:25: error: format '%d' expects argument of type 'int', but argument 5 has type 'size_t' {aka 'long unsigned int'} [-Werror=format=] | 23 | #define PREFIX(format) "%d\t: %s - " format | ../../../git/include/logger/btrMgr_logger.h:39:22: note: in definition of macro 'LOG_WARN' | 39 | fprintf (stderr, format, __VA_ARGS__);\ | ../../../git/include/logger/btrMgr_logger.h:68:53: note: in expansion of macro 'PREFIX' | 68 | #define BTRMGRLOG_WARN(format, ...) LOG_WARN(PREFIX (format), __LINE__, __FUNCTION__, ##__VA_ARGS__) | ../../../git/src/audioCap/btrMgr_audioCap.c:1270:13: note: in expansion of macro 'BTRMGRLOG_WARN' | 1270 | BTRMGRLOG_WARN("Status Changed - Fifo Depth = %d\n", lstBtrMgrRmfAcStatus.fifoDepth); | ../../../git/src/audioCap/btrMgr_audioCap.c:1270:60: note: format string is defined here | cc1: all warnings being treated as errors	Add CFLAGS in bbappend in meta-cmf-rasp	https://code.rdkcentral.com/r/c/rdk/components/generic/bluetooth_mgr/+/65913	Closed

12	git/src/tcjson.cpp	../git/src/tcjson.cpp:175:20: error: invalid conversion from 'int (*)(void*, const char*, unsigned int)' to 'int (*)(void*, const char*, size_t)' {aka 'int (*)(void*, const char*, long unsigned int)'} [-fpermissive] | 175 | ParserContext::parse_number, | | ~~~~~~~~~~~~~~~^~~~~~~~~~~ | | int (*)(void*, const char*, unsigned int) | ../git/src/tcjson.cpp:176:20: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 176 | ParserContext::parse_string, | | ~~~~~~~~~~~~~~~^~~~~~~~~~~ | | int (*)(void*, const unsigned char*, unsigned int) | ../git/src/tcjson.cpp:178:20: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 178 | ParserContext::parse_map_key, | | ~~~~~~~~~~~~~~~^~~~~~~~~~~ | | int (*)(void*, const unsigned char*, unsigned int) | ../git/src/tcjson.cpp: In member function 'std::string TcJson::toString(bool) const': | ../git/src/tcjson.cpp:700:31: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'} | 700 | yajl_gen_get_buf(g, &buf, &len); | | ^~~~ | | unsigned int*	Modified error lines in tcjson.cpp in fog comp change the datatype accordingly	https://code.rdkcentral.com/r/c/components/generic/fog/+/67287	Closed
13	rdkservices/3.0+gitAUTOINC+1323f96851-r1/git/RDKShell/RDKShell.cpp	error: cannot bind non-const lvalue reference of type 'uint32_t&' {aka 'unsigned int&'} to an rvalue of type 'uint32_t' {aka 'unsigned int'}	CompositorController::screenShot(data, (unsigned int&)size) - RDKShell.cpp - rdkservice comp	https://github.com/rdkcentral/rdkservices/pull/2674	Merged and Closed
14	git/src/ctrlm_database.cpp	./../git/src/ctrlm_database.cpp:1433:88: error: invalid conversion from 'guint64*' {aka 'long unsigned int*'} to 'sqlite_uint64*' {aka 'long long unsigned int*'} [-fpermissive] 1433 | ctrlm_db_read_uint64(CTRLM_DB_TABLE_CTRLMGR, CTRLM_DB_DEVICE_UPDATE_KEY_SESSION_ID, &device_update_session_id); | ^~~~~~~~~~~~~~~~~~~~~~~~~ | guint64* {aka long unsigned int*} ../../git/src/ctrlm_database.cpp:732:78: note: initializing argument 3 of 'int ctrlm_db_read_uint64(const char*, const char*, sqlite_uint64*)' 732 | int ctrlm_db_read_uint64(const char *table, const char *key, sqlite_uint64 *value) { | ~~~~~~~~~~~~~~~^~~~~ ../../git/src/ctrlm_database.cpp: In function 'void ctrlm_db_rf4ce_read_polling_methods (ctrlm_network_id_t, ctrlm_controller_id_t, guint8*)': ../../git/src/ctrlm_database.cpp:2306:51: error: invalid conversion from 'guint64*' {aka 'long unsigned int*'} to 'sqlite_uint64*' {aka 'long long unsigned int*'} [-fpermissive] 2306 | ctrlm_db_read_uint64(table, "polling_methods", &temp_polling_methods); | ^~~~~~~~~~~~~~~~~~~~	guint64 -> long long unsigned int (ctrlm_database.cpp)	https://code.rdkcentral.com/r/c/rdk/components/generic/control/+/69726	Closed

15	git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp	../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp: In static member function 'static void DSClientReqHandler::checkForUpdates()': | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:452:87: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 452 | hostIf_STBServiceHDMI *pIface = hostIf_STBServiceHDMI::getInstance((int) elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:464:101: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 464 | hostIf_STBServiceVideoOutput *pIface = hostIf_STBServiceVideoOutput:: getInstance((int)elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:476:103: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 476 | hostIf_STBServiceVideoDecoder *pIface = hostIf_STBServiceVideoDecoder:: getInstance((int)elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:489:112: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 489 | hostIf_STBServiceAudioInterface *pIfaceAudio = hostIf_STBServiceAudioInterface::getInstance((int)elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:502:94: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 502 | hostIf_STBServiceSPDIF *pIfaceSPDIF = hostIf_STBServiceSPDIF:: getInstance((int)elem->data); | | ^~~~	Update hostIf_dsClient_ReqHandler.cpp change the datatype accordingly	https://code.rdkcentral.com/r/c/rdk/components/generic/tr69hostif/+/65721	Closed
16	git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp	| ../../../../git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp:154:5: error: invalid conversion from 'int (*)(void*, const char*, unsigned int)' to 'int (*)(void*, const char*, size_t)' {aka 'int (*)(void*, const char*, long unsigned int)'} [-fpermissive] | 154 | process_number, | | ^~~~~~~~~~~~~~ | | int (*)(void*, const char*, unsigned int) | ../../../../git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp:155:5: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 155 | process_string, | | ^~~~~~~~~~~~~~ | | int (*)(void*, const unsigned char*, unsigned int) | ../../../../git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp:157:5: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 157 | process_map_key, | | ^~~~~~~~~~~~~~~	Update hostIf_jsonReqHandlerThread.cpp	https://code.rdkcentral.com/r/c/rdk/components/generic/tr69hostif/+/69735	Closed

17	/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp	/home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:17719:67: error: invalid conversion from 'int64_t*' {aka 'long int*'} to 'long long int*' [-fpermissive]
		
		| 17719 | if (sessionmgr_GetLongIntFromJson(item, "interval", &uid_interval)) {
		
		| | ^~~~~~~~~~~~
		
		| | int64_t* {aka long int*}
		
		| In file included from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:122:
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgrJsonHelper.h:39:90: note: initializing argument 3 of 'bool sessionmgr_GetLongIntFromJson(json_t*, const char*, long long int*)'
		
		| 39 | bool sessionmgr_GetLongIntFromJson(json_t *object, const char* name, long long *val);
		
		| | ~~~~~~~~~~~^~~
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:17728:67: error: invalid conversion from 'int64_t*' {aka 'long int*'} to 'long long int*' [-fpermissive]
		
		| 17728 | if (sessionmgr_GetLongIntFromJson(uidParamsObject, "count", &uid_count)) {
		
		| | ^~~~~~~~~~
		
		| | int64_t* {aka long int*}
		
		| In file included from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:122:
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgrJsonHelper.h:39:90: note: initializing argument 3 of 'bool sessionmgr_GetLongIntFromJson(json_t*, const char*, long long int*)'
		
		| 39 | bool sessionmgr_GetLongIntFromJson(json_t *object, const char* name, long long *val);
		
		| | ~~~~~~~~~~~^~~
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:17730:74: error: invalid conversion from 'int64_t*' {aka 'long int*'} to 'long long int*' [-fpermissive]
		
		| 17730 | if (sessionmgr_GetLongIntFromJson(uidParamsObject, "interval", &uid_interval)) {
		
		| | ^~~~~~~~~~~~
		
		/home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:14531:84: error: call of overloaded 'addNum(const char*&, const char [5], int64_t)' is ambiguous
		
		| 14531 | response.addNum(property, "%lld", session->source->getTimeshiftBuffer());
			Update SessionMgr.cpp datatypes according to the error	https://code.rdkcentral.com/r/c/components/generic/sessionmgr/+/72400	Closed

18	recorder/1.99+gitAUTOINC+1ced954c99-r0/git/Recording.cpp	rmfstreamer - undefined reference to `RMFiPPVSrc::purchasePPVEvent(unsigned int&)'	added stub for RMFiPPVSrc::purchasePPVEvent(unsigned int&) in recording.cpp		Closed

19	git/daemon/source/utils/logging.cpp	| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/recipe-sysroot/usr/include/qt5/QtCore/qbasicatomic.h: In instantiation of 'T QBasicAtomicInteger<T>::fetchAndAndOrdered(T) [with T = int]':
		
		| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/recipe-sysroot/usr/include/qt5/QtCore/qbasicatomic.h:254:14: required from 'T QBasicAtomicInteger<T>::operator&=(T) [with T = int]'
		
		| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/git/daemon/source/utils/logging.cpp:630:36: required from here
		
		| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/recipe-sysroot/usr/include/qt5/QtCore/qbasicatomic.h:220:37: error: 'fetchAndAndOrdered' is not a member of 'QBasicAtomicInteger<int>::Ops' {aka 'QAtomicOps<int>'}
		
		| 220 | { return Ops::fetchAndAndOrdered(_q_value, valueToAdd); }
		
		| | ~~~~~~~~~~~~~~~~~~~~~~~~^~~~~~~~~~~~~~~~~~~~~
			g_logTargets &= ~LoggingTarget::EthanLog;
			
			change the expression to
			
			g_logTargets = (g_logTargets & ~LoggingTarget::EthanLog);
				https://code.rdkcentral.com/r/c/rdk/components/generic/blercudaemon/+/67318	Closed

20	servicemanager module	| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/recipe-sysroot-native/usr/bin/aarch64-rdk-linux/../../libexec/aarch64-rdk-linux/gcc/aarch64-rdk-linux/9.3.0/ld: ../servicemanager/libservicemanager.so: undefined reference to `QAbstractScrollArea::viewport() const' | collect2: error: ld returned 1 exit status | Makefile:125: recipe for target 'servicemanagerapp' failed | make[1]: *** [servicemanagerapp] Error 1	add the below changes in servicemanagerapp.pro QT += widgets QT += opengl Path : servicemanager/1.99-r0/git/build/servicemanagerapp/servicemanagerapp.pro	https://code.rdkcentral.com/r/c/rdk/components/generic/servicemanager/+/66389	Closed

21	git/src/helpers/jsonwriter.cpp	| ../../git/src/helpers/jsonwriter.cpp: In member function 'QString JSONWriter::write(const QVariantHash&)': | ../../git/src/helpers/jsonwriter.cpp:71:49: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'} | 71 | yajl_gen_get_buf((yajl_gen) m_handle, &buf, &len); | | ^~~~ | | unsigned int* | ../../git/src/helpers/jsonwriter.cpp: In member function 'QString JSONWriter::write(const QVariantMap&)': | ../../git/src/helpers/jsonwriter.cpp:89:49: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'} | 89 | yajl_gen_get_buf((yajl_gen) m_handle, &buf, &len); | | ^~~~ | | unsigned int* | /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/recipe-sysroot/usr/include/yajl/yajl_gen.h:146:56: note: initializing argument 3 of 'yajl_gen_status yajl_gen_get_buf(yajl_gen, const unsigned char**, size_t*)' | 146 | size_t * len); | | ~~~~~~~~~^~~ | ../../git/src/helpers/jsonwriter.cpp: In member function 'QString JSONWriter::write(QVariantList&)': | ../../git/src/helpers/jsonwriter.cpp:108:49: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'}	unsigned int len long unsigned int len	https://code.rdkcentral.com/r/c/rdk/components/generic/servicemanager/+/66389	Closed

22	servicemanager module	| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/recipe-sysroot-native/usr/bin/aarch64-rdk-linux/../../libexec/aarch64-rdk-linux/gcc/aarch64-rdk-linux/9.3.0/ld: ../servicemanager/libservicemanager.so: undefined reference to `ServiceManager::HTTPNetworkAccessManager::HTTPNetworkAccessManager(QObject*)'	comment out the below conditions in build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/git/build/servicemanager/servicemanager.pro file
			
			#contains(DEFINES, SCREEN_CAPTURE) {
			
			# !contains(DEFINES, DISABLE_SCREEN_CAPTURE) {
			
			.
			
			.
			
			#.}
			
			#}
				https://code.rdkcentral.com/r/c/rdk/components/generic/servicemanager/+/66389	Closed

Regressions Occured

	Source / Module	Error/Warning	Changes	Code Review / Jira Ticket	
1	Module : rtRemote src /rtRemoteValueWriter.cpp	| [21/45] /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/recipe-sysroot-native/usr/bin/aarch64-rdk-linux/aarch64-rdk-linux-g++ -DRAPIDJSON_HAS_STDSTRING -DRT_PLATFORM_LINUX -DRT_REMOTE_LOOPBACK_ONLY -Drtremote_shared_EXPORTS -I/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/git/include -I/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/git/external -I/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/git/src -I. -I/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/recipe-sysroot/usr/include/pxcore -mcpu=cortex-a72+crc+crypto --sysroot=/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/recipe-sysroot -pipe -g -feliminate-unused-debug-types -fmacro-prefix-map=/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0=/usr/src/debug/rtremote/2.x+gitAUTOINC+9c5eeba065-r0 -fdebug-prefix-map=/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0=/usr/src/debug/rtremote/2.x+gitAUTOINC+9c5eeba065-r0 -fdebug-prefix-map=/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0 /recipe-sysroot= -fdebug-prefix-map=/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/recipe-sysroot-native= -O3 -Wno-deprecated-declarations -Wno-maybe-uninitialized -Wno-address -fno-delete-null-pointer-checks -fno-delete-null-pointer-checks -Wl,--warn-unresolved-symbols -fvisibility-inlines-hidden -mcpu=cortex-a72+crc+crypto --sysroot=/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/recipe-sysroot -std=c++0x -O2 -fPIC -std=gnu++11 -MD -MT CMakeFiles/rtremote_shared.dir/src/rtRemoteServer.cpp.o -MF CMakeFiles/rtremote_shared.dir/src/rtRemoteServer.cpp.o.d -o CMakeFiles/rtremote_shared.dir/src/rtRemoteServer.cpp.o -c /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/git/src/rtRemoteServer.cpp | ninja: build stopped: subcommand failed. | WARNING: exit code 1 from a shell command. | ERROR: Execution of '/home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rtremote/2.x+gitAUTOINC+9c5eeba065-r0/temp/run.do_compile.2058993' failed with exit code 1 ERROR: Task (/home/pjames993/64bit_rpi4_apr18/meta-rdk/recipes-common/rtremote/rtremote_git.bb:do_compile) failed with exit code '1' 5c6de480ebf4472c1f688cbb8f34387a2c1885c7	Please refer the review link	https://github.com/pxscene/rtRemote/pull/4	Merged and closed

2	Module : rdkservices
	
	git/RDKShell/RDKShell.cpp
		| /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/rdkservices/3.0+gitAUTOINC+2f0616e469-r1/git/RDKShell/RDKShell.cpp:1099:62: error: cannot bind non-const lvalue reference of type 'uint32_t&' {aka 'unsigned int&'} to an rvalue of type 'uint32_t' {aka 'unsigned int'}
		
		| 1099 | CompositorController::screenShot(data, size);
		
		| | ^~~~
			@@ -1067,7 +1094,7 @@ namespace WPEFramework {
			
			if (needsScreenshot)
			
			{
			
			uint8_t* data = nullptr;
			
			- size_t size;
			
			+ uint32_t size;
			
			string screenshotBase64;
			
			CompositorController::screenShot(data, size);
			
			size_t encodedImageSize = b64_get_encoded_buffer_size(size);
				https://github.com/rdkcentral/rdkservices/pull/2674	Merged to STABLE2

3	Module : rdkx-logger git/src/rdkx_logger_private.h	../../git/src/rdkx_logger_level.hash:61:1: error: conflicting types for 'rdkx_logger_level_str_to_num' | In file included from ../../git/src/rdkx_logger_level.hash:6: | ../../git/src/rdkx_logger_private.h:25:30: note: previous declaration of 'rdkx_logger_level_str_to_num' was here | 25 | struct rdkx_logger_level_s * rdkx_logger_level_str_to_num(const char *str, unsigned int len); | | ^~~~~~~~~~~~~~~~~~~~~~~~~~~~	diff --git a/src/rdkx_logger_private.h b/src/rdkx_logger_private.h index 49224e5..a475514 100644 --- a/src/rdkx_logger_private.h +++ b/src/rdkx_logger_private.h @@ -18,8 +18,10 @@ # limitations under the License. ## */ + +#include <stddef.h> typedef struct rdkx_logger_module_s { char *name; unsigned char id; } rdkx_logger_module_t; typedef struct rdkx_logger_level_s { char *name; unsigned char level; } rdkx_logger_level_t; -struct rdkx_logger_module_s *rdkx_logger_module_str_to_index(const char *str, unsigned int len); -struct rdkx_logger_level_s * rdkx_logger_level_str_to_num(const char *str, unsigned int len); +struct rdkx_logger_module_s *rdkx_logger_module_str_to_index(const char *str, size_t len); +struct rdkx_logger_level_s * rdkx_logger_level_str_to_num(const char *str, size_t len);	https://gerrit.teamccp.com/#/c/649640/ https://ccp.sys.comcast.net/browse/DELIA-56629	Issue is resolved. Code merged by David Wolaver
4	Module : xr-speech-vrex src/xrsv_ws/xrsv_ws_private.h xrsv_ws_nextgen/xrsv_ws_nextgen_private.h	| ../../git/src/xrsv_ws/xrsv_ws_request.hash:61:1: error: conflicting types for 'xrsv_ws_request_handler_get' | In file included from ../../git/src/xrsv_ws/xrsv_ws_request.hash:6: | ../../git/src/xrsv_ws/xrsv_ws_private.h:83:36: note: previous declaration of 'xrsv_ws_request_handler_get' was here | 83 | struct xrsv_ws_request_handler_s * xrsv_ws_request_handler_get(const char *str, unsigned int len); | | ^~~~~~~~~~~~~~~~~~~~~~~~~~~ | Makefile:542: recipe for target 'xrsv_ws/xrsv_ws_request.lo' failed | make[3]: *** [xrsv_ws/xrsv_ws_request.lo] Error 1 **********	diff --git a/src/xrsv_ws/xrsv_ws_private.h b/src/xrsv_ws/xrsv_ws_private.h index eecd6fb..6765591 100644 --- a/src/xrsv_ws/xrsv_ws_private.h +++ b/src/xrsv_ws/xrsv_ws_private.h	https://gerrit.teamccp.com/#/c/649640/ https://ccp.sys.comcast.net/browse/DELIA-56629	Issue is resolved. Code merged by David Wolaver

```
| ../../git/src/xrsv_ws/xrsv_ws_action_phone.hash:61:1: error: conflicting types for 'xrsv_ws_action_phone_handler_get'

| In file included from ../../git/src/xrsv_ws/xrsv_ws_action_phone.hash:6:

| ../../git/src/xrsv_ws/xrsv_ws_private.h:85:36: note: previous declaration of 'xrsv_ws_action_phone_handler_get' was here

|    85 | struct xrsv_ws_action_handler_s *  xrsv_ws_action_phone_handler_get(const char *str, unsigned int len);

|       |                                    ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

| Makefile:542: recipe for target 'xrsv_ws/xrsv_ws_action_phone.lo' failed

| make[3]: *** [xrsv_ws/xrsv_ws_action_phone.lo] Error 1

| ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_tv_control.hash:61:1: error: conflicting types for 'xrsv_ws_nextgen_tv_control_handler_get'

| In file included from ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_tv_control.hash:6:

| ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_private.h:79:47: note: previous declaration of 'xrsv_ws_nextgen_tv_control_handler_get' was here

|    79 | struct xrsv_ws_nextgen_tv_control_handler_s * xrsv_ws_nextgen_tv_control_handler_get(const char *str, unsigned int len);

|       |                                               ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

| ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_msgtype.hash:61:1: error: conflicting types for 'xrsv_ws_nextgen_msgtype_handler_get'

| In file included from ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_msgtype.hash:6:

| ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_private.h:78:44: note: previous declaration of 'xrsv_ws_nextgen_msgtype_handler_get' was here

|    78 | struct xrsv_ws_nextgen_msgtype_handler_s * xrsv_ws_nextgen_msgtype_handler_get(const char *str, unsigned int len);

|       |                                            ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

| ../../git/src/xrsv_ws/xrsv_ws_action.hash:61:1: error: conflicting types for 'xrsv_ws_action_handler_get'

| In file included from ../../git/src/xrsv_ws/xrsv_ws_action.hash:6:

| ../../git/src/xrsv_ws/xrsv_ws_private.h:84:36: note: previous declaration of 'xrsv_ws_action_handler_get' was here

|    84 | struct xrsv_ws_action_handler_s *  xrsv_ws_action_handler_get(const char *str, unsigned int len);

|       |                                    ^~~~~~~~~~~~~~~~~~~~~~~~~~

| Makefile:542: recipe for target 'xrsv_ws/xrsv_ws_action.lo' failed

| make[3]: *** [xrsv_ws/xrsv_ws_action.lo] Error 1
```

```
@@ -78,8 +78,8 @@
typedef bool
(*xrsv_ws_handler_bool_t)
(xrsv_ws_obj_t *obj, json_t
*obj_json);

 typedef struct
xrsv_ws_request_handler_s
{ char *name;
xrsv_ws_handler_bool_t
func; }
xrsv_ws_request_handler_t;

 typedef struct
xrsv_ws_action_handler_s  {
char *name;
xrsv_ws_handler_void_t
func; }
xrsv_ws_action_handler_t;



-struct
xrsv_ws_request_handler_s
*
xrsv_ws_request_handler_g
et(const char *str, unsigned
int len);

-struct
xrsv_ws_action_handler_s
*  xrsv_ws_action_handler_g
et(const char *str, unsigned
int len);

-struct
xrsv_ws_action_handler_s
*  xrsv_ws_action_phone_ha
ndler_get(const char *str,
unsigned int len);

+struct
xrsv_ws_request_handler_s
*
xrsv_ws_request_handler_g
et(const char *str, size_t
len);

+struct
xrsv_ws_action_handler_s
*  xrsv_ws_action_handler_g
et(const char *str, size_t
len);

+struct
xrsv_ws_action_handler_s
*  xrsv_ws_action_phone_ha
ndler_get(const char *str,
size_t len);



 #endif

diff --git a/src
/xrsv_ws_nextgen
/xrsv_ws_nextgen_private.h
b/src/xrsv_ws_nextgen
/xrsv_ws_nextgen_private.h

index 8daee81..e6bb2a6
100644

--- a/src/xrsv_ws_nextgen
/xrsv_ws_nextgen_private.h

+++ b/src/xrsv_ws_nextgen
/xrsv_ws_nextgen_private.h

@@ -73,7 +73,7 @@
typedef void
(*xrsv_ws_nextgen_handler
_void_t)
(xrsv_ws_nextgen_obj_t
*obj, json_

 typedef struct
xrsv_ws_nextgen_msgtype_
handler_s { char *name;
xrsv_ws_nextgen_handler_b
ool_t func; }
xrsv_ws_nextgen_msgtype_
handler_t;

 typedef struct
xrsv_ws_nextgen_tv_control
_handler_s { char *name;
xrsv_ws_nextgen_handler_v
oid_t func; }
xrsv_ws_nextgen_tv_control
_handler_t;
```

			-struct xrsv_ws_nextgen_msgtype_handler_s * xrsv_ws_nextgen_msgtype_handler_get(const char *str, unsigned int len); -struct xrsv_ws_nextgen_tv_control_handler_s * xrsv_ws_nextgen_tv_control_handler_get(const char *str, unsigned int len); +struct xrsv_ws_nextgen_msgtype_handler_s * xrsv_ws_nextgen_msgtype_handler_get(const char *str, size_t len); +struct xrsv_ws_nextgen_tv_control_handler_s * xrsv_ws_nextgen_tv_control_handler_get(const char *str, size_t len);		
5	Module : mediaframework qamsource/simgr/oob/include/rmf_sicache.h	| ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5856:70: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5856 | ts->services->push_back((rmf_SiServiceHandle)new_si_entry); | | ^~~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5890:73: error: cast from 'rmf_SiTransportStreamEntry*' to 'rmf_SiTransportStreamHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5890 | new_si_entry->ts_handle = (rmf_SiTransportStreamHandle) ts; | | ^~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5891:62: error: cast from 'rmf_SiProgramInfo*' to 'rmf_SiProgramHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5891 | new_si_entry->program = (rmf_SiProgramHandle)pgm; | | ^~~	soln : uint32_t -> uintptr_t	https://code.rdkcentral.com/r/c/rdk/components/generic/mediaframework/+/70409	CODE MERGED

6	Module : wpe-webkit git/Source/WebCore/platform/ttsclient/PlatformSpeechSynthesizerTTSClient.cpp	| /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/wpe-webkit/2.22.4+gitAUTOINC+ed39c92e59-r0/git/Source/WebCore/platform/ttsclient/PlatformSpeechSynthesizerTTSClient.cpp:185:40: error: cast from 'WebCore::PlatformSpeechSynthesisUtterance*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive] | /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/wpe-webkit/2.22.4+gitAUTOINC+ed39c92e59-r0/git/Source/WebCore/platform/ttsclient/PlatformSpeechSynthesizerTTSClient.cpp:234:78: error: cast from 'WebCore::PlatformSpeechSynthesisUtterance*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive] | 234 | m_ttsClient->resume(m_ttsSessionId, (uint32_t)m_currentUtterance.get()); | | ^ | /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/wpe-webkit/2.22.4+gitAUTOINC+ed39c92e59-r0/git/Source/WebCore/platform/ttsclient/PlatformSpeechSynthesizerTTSClient.cpp:273:59: error: cast from 'WebCore::PlatformSpeechSynthesisUtterance*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive] | 273 | speakingFinished((uint32_t)m_currentUtterance.get(), SpeechErrorInterrupted); | | ^	Need to do implemenataion as per the comments. Comments will be followed up by Jira Ticket : ⚠ REF PLTV -1341 - Jira proje ct does n't exist or you don't have permi ssion to view it.	https://code.rdkcentral.com/r/c/rdk/components/generic/rdk-oe/meta-rdk-ext/+/71000	This change will not impact any of the basic functionalities. STATUS : MERGED

7	Module : qtbase	../../../../include/QtGui/../../../qtbase-opensource-src-5.1.1/src/gui/opengl/qopengl.h:97:17: error: conflicting declaration 'typedef GLfloat GLdouble' 97 | typedef GLfloat GLdouble; | ^~~~~~~ In file included from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/qtbase/5.1.1-r0/qtbase-opensource-src-5.1.1/src/plugins/platforms/kms/qkmsscreen.h:59, from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/qtbase/5.1.1-r0/qtbase-opensource-src-5.1.1/src/plugins/platforms/kms/qkmsintegration.cpp:44: /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/qtbase/5.1.1-r0/recipe-sysroot/usr/include/GLES2/gl2ext.h:3092:16: note: previous declaration as 'typedef double GLdouble' 3092 | typedef double GLdouble;	https://code.rdkcentral.com/r/plugins/gitiles/components/generic/rdk-oe/meta-cmf-qt5/+/refs/heads/rdk-next/recipes-qt/qt5/qtbase_5.1.1.bbappend SRC_URI_append_arm = " \ file://0003-GLdouble-conflict-declaration-fix.patch \ " https://code.rdkcentral.com/r/plugins/gitiles/components/generic/rdk-oe/meta-cmf-qt5/+/refs/heads/rdk-next/recipes-qt/qt5/qtbase-5.1.1/0003-GLdouble-conflict-declaration-fix.patch diff --git a/src/gui/opengl/qopengl.h b/src/gui/opengl/qopengl.h index 6e8be668..524e1860 100644 --- a/src/gui/opengl/qopengl.h +++ b/src/gui/opengl/qopengl.h @@ -94,7 +94,7 @@ typedef char GLchar; # define GL_DOUBLE GL_FLOAT # endif # ifndef GLdouble -typedef GLfloat GLdouble; +typedef double GLdouble; # endif # endif // Q_OS_MAC	https://code.rdkcentral.com/r/c/components/generic/rdk-oe/meta-cmf-qt5/+/72202	Issue is resolved and uploaded for review. Current Status : Code Merged
8	Module : sessionmgr	| /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp: In function 'session_err_t sessionmgr_GetSessionProperty(session_t*, const char*, SimpleJsonEnc&)': | /home/pjames993/64bit_rpi4_apr18/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:14850:88: error: call of overloaded 'addNum(const char*&, const char [4], int64_t)' is ambiguous | 14850 | response.addNum(property, "%" PRId64, session->source->getTimeshiftBuffer()); | | ^	Initial Solution: response.addNum(property, "%" PRId64, (long long) session->source->getTimeshiftBuffer())	https://code.rdkcentral.com/r/c/components/generic/sessionmgr/+/72400	Resolution is identified and added for code review. Status : Code Merged
9	Module : rmfgeneric / mediaframework	In file included from ../../git/anycas/demoCas/demoCas.cpp:22: ../../git/anycas/demoCas/demoCas.h: In member function 'virtual void DemoCasHelper::processData(std::shared_ptr<anycas::CASHelperContext>, bool, const std::vector<unsigned char>&)': ../../git/anycas/demoCas/demoCas.h:295:43: error: cast from 'char*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive] 295 | uint32_t addr = (uint32_t)pvtData; | ^~~~~~	Intial Solution : uint32_t addr = (uintptr_t) pvtData;	https://code.rdkcentral.com/r/c/rdk/components/generic/mediaframework/+/72460	STATUS : MERGED

10	Module : rdkmediaplayer	../git/rdkmediaplayer.cpp: In member function 'rtError RDKMediaPlayer::open(rtString, rtString)':
		../git/rdkmediaplayer.cpp:764:42: error: cast from 'RDKMediaPlayerImpl*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive]
		764 | resp = (std::to_string((uint32_t)m_pImpl)).c_str();
		| ^~~~~~
		../git/rdkmediaplayer.cpp:785:51: error: cast from 'RDKMediaPlayerImpl*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive]
		785 | resp = (std::to_string((uint32_t)*it)).c_str();
		| ^~
			Solution :
			
			--- a/rdkmediaplayer.cpp
			
			+++ b/rdkmediaplayer.cpp
			
			@@ -761,7 +761,7 @@
			rtError RDKMediaPlayer::
			open(rtString openData,
			rtString resp)
			
			{
			
			LOG_INFO("CAS
			Managment session is
			already avialable");
			
			}
			
			- resp = (std::to_string
			((uint32_t)m_pImpl)).c_str();
			
			+ resp = (std::to_string
			((uintptr_t)m_pImpl)).c_str();
			
			LOG_INFO("resp = %
			x", resp.cString());
			
			}
			
			// For Live Playback
			Session
			
			@@ -782,7 +782,7 @@
			rtError RDKMediaPlayer::
			open(rtString openData,
			rtString resp)
			
			if(!((*it)-
			>isManagementSession())
			&& (*it)->doCanPlayURL
			(m_currentURL))
			
			{
			
			LOG_INFO
			("Reusing cached player");
			
			- resp = (std::
			to_string((uint32_t)*it)).
			c_str();
			
			+ resp = (std::
			to_string((uintptr_t)*it)).
			c_str();
			
			LOG_INFO("resp
			= %x", resp.cString());
			
			}
				https://code.rdkcentral.com/r/c/rdk/components/generic/rdkmediaplayer/+/71632/	Status : MERGED

Logs after 64bit migration:

WPEFramework Logs

Jul 18 10:37:46.325860 /usr/bin/WPEFramework[1229]: [Mon, 18 Jul 2022 10:37:46]:[Config.h:788]: Startup: Accessor: http://192.168.0.105:9998/Service
Jul 18 10:37:46.326046 /usr/bin/WPEFramework[1229]: [Mon, 18 Jul 2022 10:37:46]:[Config.h:789]: Startup: Interface IP: 192.168.0.105
Jul 18 10:37:46.330725 /usr/bin/WPEFramework[1229]: [Mon, 18 Jul 2022 10:37:46]:[SystemInfo.h:354]: Startup: EVENT: Identifier: OE5F8BDkx0
Jul 18 10:37:46.330774 /usr/bin/WPEFramework[1229]: [Mon, 18 Jul 2022 10:37:46]:[SystemInfo.h:355]: Startup: EVENT: Architecture: aarch64
Jul 18 10:37:46.330806 /usr/bin/WPEFramework[1229]: [Mon, 18 Jul 2022 10:37:46]:[SystemInfo.h:356]: Startup: EVENT: Chipset: BCM2835
Jul 18 10:37:46.330838 /usr/bin/WPEFramework[1229]: [Mon, 18 Jul 2022 10:37:46]:[SystemInfo.h:357]: Startup: EVENT: FirmwareVersion: 5.10.52-v8

Command Line Logs

root@raspberrypi4-64-rdk-hybrid:~# uname -a

Linux raspberrypi4-64-rdk-hybrid 5.10.52-v8 #1 SMP PREEMPT Sun Jul 17 09:34:53 UTC 2022 aarch64 GNU/Linux

root@raspberrypi4-64-rdk-hybrid:~# uname -m

aarch64

Compilation Logs

Build Configuration:

BB_VERSION = "1.46.0"

BUILD_SYS = "x86_64-linux"

NATIVELSBSTRING = "ubuntu-18.04"

TARGET_SYS = "aarch64-rdk-linux"

MACHINE = "raspberrypi4-64-rdk-hybrid"

DISTRO = "rdk"

DISTRO_VERSION = "2.0"

TUNE_FEATURES = "aarch64 cortexa72 crc crypto"

Console Logs

```
root@raspberrypi4-64-rdk-hybrid:~# file /usr/bin/rdkbrowser2
/usr/bin/rdkbrowser2: ELF 64-bit LSB executable, ARM aarch64, version 1 (GNU/Linux), dynamically linked,
interpreter /lib/ld-linux-aarch64.so.1, BuildID[sha1]=21e3fa1be1046192d65c7a1ffe1c7dd3b795f82d, for GNU/Linux
3.14.0, stripped
```

```
root@raspberrypi4-64-rdk-hybrid:~# file /usr/bin/WPEFramework-1.0.0
/usr/bin/WPEFramework-1.0.0: ELF 64-bit LSB executable, ARM aarch64, version 1 (GNU/Linux), dynamically linked,
interpreter /lib/ld-linux-aarch64.so.1, BuildID[sha1]=f27ec6ba8270af029fce09e0eb3deea24b7ac0c6, for GNU/Linux
3.14.0, stripped
```

Validated functionalities:

Status: - Working x - Not Working O - Partially Working

Sl. No	Tested	Apps	Test Results	Remarks	
1	**Basic Tests**	ssh connection		**SSH is working through LAN connection.**	
2		Default UI		**UI is coming up consistently. Checked rebooting 10 times, every time UI is loading**	
3		Time	**X**	**Current time is not updated in TV UI**	
4	**Featured Content**	YouTube		**Playback is working fine for selected content.**	
		Xumo	**X**	**1.AV decoding is not smooth. 2.Audio decoding is also not proper. Looks like rewind audio.**	
5	**Lightning Apps**	CNN	**X**	**1.AV decoding is not smooth. 2.AV sync is not proper**	
		Vimeo		**AV Playback is working.**	
6	**Featured Video on Demand**	Fantasy-Island		**AV Playback is working.**	
7	**Playback**	gst-launch		**AV playback is working. Tested URL: > gst-launch-1.0 playbin uri=aamp://bitdash-a.akamaihd.net/content/MI201109210084_1/m3u8s/f08e80da-bf1d-4e3d-8899-f0f6155f6efa.m3u8 video-sink=westerossink > gst-launch-1.0 playbin uri=aamp://bitdash-a.akamaihd.net/content/sintel/hls/playlist.m3u8 video-sink=westerossink**	
8		aamp-cli		**AV playback is working Tested Commands: aamp-cli http://devimages.apple.com/iphone/samples/bipbop/bipbopall.m3u8 aamp-cli http://bitdash-a.akamaihd.net/content/MI201109210084_1/m3u8s/f08e80da-bf1d-4e3d-8899-f0f6155f6efa.m3u8 aamp-cli http://bitdash-a.akamaihd.net/content/sintel/hls/playlist.m3u8**	
9	**Settings**	BT	**X**	**1.Bluetooth pairing instability issue. 2.Paring is successful very randomly.**	
10		Wi-Fi		**1.Connecton is working. 2.Able to take ssh with Wi-Fi IP 3.Able to launch controller UI with Wi-Fi IP**	

11	**Plugins**	HTMLApp		**Tested the custom URL: https://www.google.com/**	
12		LightningApp			
13		Search And DiscoveryApp			
14		Webkitbrowser		**Tested the custom URL: https://www.google.com**	
15		Cobalt		**YouTube application launched properly**	

Known Issues:

Sl No.	Issue	Jira	Status	Resolution	Code Review
1	Resolution Issues seen. Display on TV is not full screen	UI Display on TV is not coming full screen on RPi4 Image REFP LTV-1247 - Jira project doesn't exist or you don't have permission to view it.	MERGED and CLOSED	Explanation : boot/config.txt has only one HDMI port (HDMI0) configured properly (which was only need of the day until RPi3 was used.) . This needs configured for the second HDMI port (HDMI1) also. Fix: Add the below lines in boot/config.txt file once RPi4 is booted up. a. hdmi_group [HDMI:0] hdmi_group=1 [HDMI:1] hdmi_group=1 a. hdmi_mode #hdmi_mode=4 [HDMI:0] hdmi_mode=4 [HDMI:1] hdmi_mode=4	https://code.rdkcentral.com/r/c/rdk/components/generic/rdk-oe/meta-cmf-raspberrypi/+/72060

2	Cobalt plugin is not available in Controller UI.	Cobalt Configuration for RPi4-64bit build
		
		REFP LTV-1225 - Jira project doesn't exist or you don't have permission to view it.
			RESOLUTION IDENTIFIED	Cobalt Issue Resolution :
				Files:
				1)git/src/third_party/starboard/rdk/rpi/gyp_configuration.py -> https://code.rdkcentral.com/r/plugins/gitiles/rdk/components/generic/cobalt/+/refs/heads/master/src/third_party/starboard/rdk/rpi/gyp_configuration.py?autodive=0%2F%2F%2F%2F
				change1 -> self.sabi_json_path = 'starboard/sabi/arm64/sabi-v13.json'
				
				change2 ->
				def GetEnvironmentVariables(self):
				env_variables = {}
				env_variables.update({
				'CC': os.environ['CC'],
				'CXX': os.environ['CXX'],
				'LD': os.environ['CXX'],
				'CC_host': 'gcc ',
				'CXX_host': 'g++ ',
				})
				
				2)git/src/starboard/shared/linux/cpu_features_get.cc -> https://cobalt.googlesource.com/cobalt/+/refs/heads/master/starboard/shared/linux/cpu_features_get.cc
				change ->
				#if SB_IS(32_BIT)
				~~
				// Construct hwcap bitmask by the feature flags in /proc/cpuinfo
				uint32_t ConstructHwcapFromCPUInfo(ProcCpuInfo* cpu_info,
				int16_t architecture_generation,
				uint32_t hwcap_type)
				if (hwcap_type == AT_HWCAP && architecture_generation >= 8) {
				...
				...
				...
				return hwcap_value;
				}
				#endif //SB_IS(32_BIT)
				~~
				
				3)git/src/third_party/starboard/rdk/shared/rdkservices.cc -> https://code.rdkcentral.com/r/plugins/gitiles/rdk/components/generic/cobalt/+/refs/heads/master/src/third_party/starboard/rdk/shared/rdkservices.cc?autodive=0%2F%2F%2F%2F
				
				change -> uint32_t inputLen = std::min(kMaxBufferSize, (uint32_t) payload.length());
				~~
					Code Review for source code yet to added
					
					Internediate Code Review added : https://code.rdkcentral.com/r/c/rdk/components/generic/rdk-oe/meta-cmf-raspberrypi/+/73110
					
					https://code.rdkcentral.com/r/c/rdk/components/generic/rdk-oe/meta-cmf-raspberrypi/+/74129

3.	Outline/box for Password field is not available on WiFi network screen.				