

GE Discovery PT

Revision History

Date / Version	Author	Comments
4/11/2012	Steve Moore	Initial release

Introduction

Private elements for GE modalities are defined in GE conformance statements found here: http://www.gehealthcare.com/usen/interoperability/dicom/products/ultrasound_dicom.html. The link is for US sites; other regions will find a different link for conformance statements appropriate for those devices.

Observations on GE Private Elements

Scanner/Software Versions

Link Name / GE website	Model	Software Version	Document
Discovery ST 07MWHL36.4	Discovery ST	07MWHL36.4	5257407-100 Rev C
Discovery ST petct_vct_hp.80A M4	Discovery ST	petct_vct_hp.80A M4	5161694-100 Rev. 2
Discovery STE dm09_hl2sp1.23_5257407- 100r3	Discovery STE	dm09_hl2sp1.23	5257407-100r3

GEMS_IDEN_01

In the table of private elements in this section and following:

*: Element is listed in the document

X1: Element is listed with a note: No longer supported

				Discovery ST 07MWHL36.4	Discovery ST petct_vct_hp.80A M4	Discovery STE dm09_hl2sp1.23_5257407-100r3
Description	Tag	VR	VM			
GEHC Private Creator ID	0x00090010	LO	1	*	*	
Full fidelity	0x00091001	LO	1	*	*	
Suite id	0x00091002	SH	1	*	*	
Product ID	0x00091004	SH	1	*	*	
Image Actual Date	0x00091027	SL	1	*	*	
Equipment UID	0x000910e3	UI	1	*	*	

GEMS_ACQU_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00190010	LO	1	*	*
Number of cells l in Detector	0x00191002	SL	1	*	*
Cell number at Theta	0x00191003	DS	1	*	*
Cell spacing	0x00191004	DS	1	*	*
Horiz. Frame of ref.	0x0019100f	DS	1	*	*
Series Contrast	0x00191011	SS	1	*	*
First scan ras	0x00191018	LO	1	*	*
Last scan ras	0x0019101a	LO	1	*	*
Table speed	0x00191023	DS	1	*	*
Mid scan time	0x00191024	DS	1	*	*
Mid scan flag	0x00191025	SS	1	*	*
Degrees of azimuth	0x00191026	SS	1	*	*
Number of triggers	0x0019102c	SL	1	*	*
Angle of first view	0x0019102e	DS	1	*	*
Trigger frequency	0x0019102f	DS	1	*	*
Scan FOV type	0x00191039	SS	1	*	*
Segment number	0x00191042	SS	1	*	*
Total segments requested	0x00191043	SS	1	*	*
View compression factor	0x00191047	SS	1	*	*
Recon post proc. Flag	0x00191052	SS	1	*	*
Dependent on #views processed	0x0019106a	SS	1	*	*

GEMS_REL_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00210010	LO	1	*	*
Series from which Prescribed	0x00211003	SS	1	*	*
Series Prescribed From	0x00211035	SS	1	*	*
Image Prescribed From	0x00211036	SS	1	*	*
Biopsy position	0x00211091	SS	1	*	*
Biopsy T location	0x00211092	FL	1	*	*
Biopsy ref location	0x00211093	FL	1	*	*

GEMS_STDY_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00230010	LO	1	*	*
Start time(secs) in first axial	0x00231070	FD	1	*	*

GEMS_IMAG_01

				Discovery ST 07MWHL36.4	Discovery ST petct_vct_hp.80A
GEHC Private Creator ID	0x00270010	LO	1	*	*
Scout Type	0x00271010	SS	1	*	*
Vma mamp	0x0027101c	SL	1	*	*
Vma mod	0x0027101e	SL	1	*	*
Smart scan ON/OFF flag	0x00271020	SS	1	*	*
Plane Type	0x00271035	SS	1	*	*
Center R coord of plane image	0x00271042	FL	1	*	*
Center A coord of plane image	0x00271043	FL	1	*	*
Center S coord of plane image	0x00271044	FL	1	*	*
Normal R coord	0x00271045	FL	1	*	*
Normal A coord	0x00271046	FL	1	*	*
Normal S coord	0x00271047	FL	1	*	*
Table start location	0x00271050	FL	1	*	*
Table end location	0x00271051	FL	1	*	*

GEMS_PARM_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00430010	LO	1	*	*
Window value	0x00431010	US	1	*	*
X-ray chain	0x00431012	SS	3	*	*
Number of overranges	0x00431016	SS	5	*	*
Delta start time	0x0043101e	DS	1	*	*
Max overranges in a view	0x0043101f	SL	1	*	*
Corrected after glow terms	0x00431021	SS	1	*	*
Reference channels	0x00431025	SS	6	*	*
No views ref chans blocked	0x00431026	US	6	*	*
Scan pitch ratio	0x00431027	SH	1	*	*
Unique image iden	0x00431028	OB	1	*	*
Private Scan Options	0x0043102b	SS	4	*	*
RA cord of target recon center	0x00431031	DS	2	*	*
Trigger on position	0x00431040	FL	4	*	*
Degree of rotation	0x00431041	FL	4	*	*
DAS trigger source	0x00431042	SL	4	*	*
DAS fpa gain	0x00431043	SL	4	*	*
DAS output source	0x00431044	SL	4	*	*
DAS ad input	0x00431045	SL	4	*	*
DAS cal mode	0x00431046	SL	4	*	*
Start scan to X-ray on delay	0x0043104d	FL	4	*	*
Duration of X-ray on	0x0043104e	FL	4	*	*
Recon filter	0x00431064	LO	1	*	*

GEMS-HELIOS_01

				Discovery ST 07MWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00450010	LO	1	*	*
Number of Macro Rows in Detector	0x00451001	SS	1	*	*
Macro width at ISO Center	0x00451002	FL	1	*	*
DAS type	0x00451003	SS	1	*	*
DAS gain	0x00451004	SS	1	*	*
DAS Temperature	0x00451005	SS	1	*	*
Table Direction	0x00451006	CS	1	*	*
Z smoothing Factor	0x00451007	FL	1	*	*
View Weighting Mode	0x00451008	SS	1	*	*
Sigma Row number	0x00451009	SS	1	*	*
Minimum DAS value	0x0045100a	FL	1	*	*
Maximum Offset Value	0x0045100b	FL	1	*	*
Number of Views shifted	0x0045100c	SS	1	*	*
Z tracking Flag	0x0045100d	SS	1	*	*
Mean Z error	0x0045100e	FL	1	*	*
Z tracking Error	0x0045100f	FL	1	*	*
Start View 2A	0x00451010	SS	1	*	*
Number of Views 2A	0x00451011	SS	1	*	*
Start View 1A	0x00451012	SS	1	*	*
Sigma Mode	0x00451013	SS	1	*	*
Number of Views 1A	0x00451014	SS	1	*	*
Start View 2B	0x00451015	SS	1	*	*
Number Views 2B	0x00451016	SS	1	*	*
Start View 1B	0x00451017	SS	1	*	*
Number of Views 1B	0x00451018	SS	1	*	*
Itebone Flag	0x00451021	SS	1	*	*
Peristaltic Flag	0x00451022	SS	1	*	*

CardiacReconAlgorithm	0x00451030	CS	1	*	*
AvgHeartRateForImage	0x00451031	CS	1	*	*
TemporalResolution	0x00451032	FL	1	*	*
PctRpeakDelay	0x00451033	CS	1	*	*
ActualPctRpeakDelay	0x00451034	CS	1	*	
EkgFullMaStartPhase	0x00451036	CS	1	*	*
EkgFullMaEndPhase	0x00451037	CS	1	*	*
EkgModulationMaxMa	0x00451038	CS	1	*	*
EkgModulationMinMa	0x00451039	CS	1	*	*
Noise ReductionImageFilterDesc	0x0045103b	LO	1	*	*

GEMS_CT_CARDIAC_001

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00490010	LO	1	*	*
CT Cardiac Sequence	0x00491001	SQ	1	*	*
HeartRateAtConfirm	0x00491002	CS	1	*	*
AvgHeartRatePriorToConfirm	0x00491003	FL	1	*	*
MinHeartRatePriorToConfirm	0x00491004	CS	1	*	*
MaxHeartRatePriorToConfirm	0x00491005	CS	1	*	*
StdDevHeartRate PriorToConfirm	0x00491006	FL	1	*	*
NumHeartRateSamples PriorToConfirm	0x00491007	US	1	*	*
AutoHeartRateDetectPredict	0x00491008	CS	1	*	*
SystemOptimizedHeartRate	0x00491009	CS	1	*	*
EkgMonitorType	0x0049100a	ST	1	*	*
NumReconSectors	0x0049100b	CS	1	*	*

RpeakTimeStamps	0x0049100c	FL	256	*	*
-----------------	------------	----	-----	---	---

GEMS_PETD_01

				Discovery ST 07MWHL36.4	Discovery ST petct_vct_hp.80A M4	Discovery STE dm09_hl2sp1.23_5257407-100r3
Description	Tag	VR	VM			
GEHC Private Creator ID	0x00090010	LO	1	*	*	*
GE Discovery PET Implementation Version Name	0x00091001	LO	2	*	*	*
PET patient_id	0x00091002	LO	1	*	*	*
PET compatible_version	0x00091003	SH	1	*	*	*
PET patient_datetime	0x00091005	DT	1	*	*	*
PET type	0x00091006	SL	1	*	*	*
PET exam_id	0x00091007	UI	1	*	*	*
PET compatible_version	0x00091008	SH	1	*	*	*
PET software_version	0x00091009	SH	1	*	*	*
PET scan_id	0x0009100a	UI	1	*	*	*
PET compatible_version	0x0009100b	SH	1	*	*	*
PET software_version	0x0009100c	SH	1	*	*	*
PET scan_datetime	0x0009100d	DT	1	*	*	*
PET scan_ready	0x0009100e	DT	1	*	*	*
PET scan_description	0x0009100f	ST	1	*	*	*
PET hospital_name	0x00091010	LO	1	*	*	*
PET scanner_desc	0x00091011	LO	1	*	*	*

PET manufacturer	0x00091012	LO	1	*	*	*
PET for_identifier	0x00091013	UI	1	*	*	*
PET landmark_name	0x00091014	LO	1	*	*	*
PET landmark_abbrev	0x00091015	SH	1	*	*	*
PET patient_position	0x00091016	SL	1	*	*	*
PET scan_perspective	0x00091017	SL	1	*	*	*
PET scan_type	0x00091018	SL	1	*	*	*
PET scan_mode	0x00091019	SL	1	*	*	*
PET start_condition	0x0009101a	SL	1	*	*	*
PET start_cond_data	0x0009101b	SL	1	*	*	*
PET sel_stop_cond	0x0009101c	SL	1	*	*	*
PET sel_stop_cond_data	0x0009101d	SL	1	*	*	*
PET collect_deadtime	0x0009101e	SL	1	*	*	*
PET collect_singles	0x0009101f	SL	1	*	*	*
PET collect_countrate	0x00091020	SL	1	*	*	*
PET countrate_period	0x00091021	SL	1	*	*	*
PET delayed_events	0x00091022	SL	1	*	*	*
PET delayed_bias	0x00091023	SL	1	*	*	*
PET word_size	0x00091024	SL	1	*	*	*
PET axial_acceptance	0x00091025	SL	1	*	*	*
PET axial_angle_3d	0x00091026	SL	1	*	*	*
PET theta_compression	0x00091027	SL	1	*	*	*
PET axial_compression	0x00091028	SL	1	*	*	*
PET gantry_tilt_angle	0x00091029	FL	1	*	*	*
PET collimation	0x0009102a	SL	1	*	*	*
PET scan_fov	0x0009102b	SL	1	*	*	*
PET axial_fov	0x0009102c	SL	1	*	*	*
PET event_separation	0x0009102d	SL	1	*	*	*
PET mask_width	0x0009102e	SL	1	*	*	*
PET binning_mode	0x0009102f	SL	1	*	*	*
PET trig_rej_method	0x00091030	SL	1	*	*	*
PET number_for_reject	0x00091031	SL	1	*	*	*
PET lower_reject_limit	0x00091032	SL	1	*	*	*
PET upper_reject_limit	0x00091033	SL	1	*	*	*
PET triggers_acquired	0x00091034	SL	1	*	*	*
PET triggers_rejected	0x00091035	SL	1	*	*	*
PET tracer_name	0x00091036	LO	1	*	*	*
PET batch_description	0x00091037	LO	1	*	*	*
PET tracer_activity	0x00091038	FL	1	*	*	*
PET meas_datetime	0x00091039	DT	1	*	*	*
PET pre_inj_volume	0x0009103a	FL	1	*	*	*

PET admin_datetime	0x0009103b	DT	1	*	*	*
PET post_inj_activity	0x0009103c	FL	1	*	*	*
PET post_inj_datetime	0x0009103d	DT	1	*	*	*
PET radionuclide_name	0x0009103e	SH	1	*	*	*
PET half_life	0x0009103f	FL	1	*	*	*
PET positron_fraction	0x00091040	FL	1	*	*	*
PET source1_holder	0x00091041	SL	1	*	*	*
PET source1_activity	0x00091042	FL	1	*	*	*
PET source1_meas_dt	0x00091043	DT	1	*	*	*
PET source1_radnuclide	0x00091044	SH	1	*	*	*
PET source1_half_life	0x00091045	FL	1	*	*	*
PET source2_holder	0x00091046	SL	1	*	*	*
PET source2_activity	0x00091047	FL	1	*	*	*
PET source2_meas_dt	0x00091048	DT	1	*	*	*
PET source2_radnuclide	0x00091049	SH	1	*	*	*
PET source2_half_life	0x0009104a	FL	1	*	*	*
PET source_speed	0x0009104b	SL	1	*	*	*
PET source_location	0x0009104c	FL	1	*	*	*
PET emission_present	0x0009104d	SL	1	*	*	*
PET lower_axial_acc	0x0009104e	SL	1	*	*	*
PET upper_axial_acc	0x0009104f	SL	1	*	*	*
PET lower_coinc_limit	0x00091050	SL	1	*	*	*
PET upper_coinc_limit	0x00091051	SL	1	*	*	*
PET coinc_delay_offset	0x00091052	SL	1	*	*	*
PET coinc_output_mode	0x00091053	SL	1	*	*	*
PET upper_energy_limit	0x00091054	SL	1	*	*	*
PET lower_energy_limit	0x00091055	SL	1	*	*	*
PET normal_cal_id	0x00091056	UI	1	*	*	*
PET normal_2d_cal_id	0x00091057	UI	1	*	*	*
PET blank_cal_id	0x00091058	UI	1	*	*	*
PET wc_cal_id	0x00091059	UI	1	*	*	*
PET derived	0x0009105a	SL	1	*	*	*
PET contrast_agent	0x0009105b	LO	1	*	*	*
PET vqc_x_axis_trans	0x000910cb	FL	1	*	*	*
PET vqc_x_axis_tilt	0x000910cc	FL	1	*	*	*
PET vqc_y_axis_trans	0x000910cd	FL	1	*	*	*
PET vqc_y_axis_swivel	0x000910ce	FL	1	*	*	*
PET vqc_z_axis_trans	0x000910cf	FL	1	*	*	*
PET vqc_z_axis_roll	0x000910d0	FL	1	*	*	*
PET ctac_conv_scale	0x000910d1	LO	1	*	*	*
PET image_set_id	0x000910d2	UI	1	*	*	*

PET constrast_route	0x000910d3	SL	1	*	*	*
PET image_one_loc	0x000910d6	FL	1	*	*	*
PET image_index_loc	0x000910d7	FL	1	*	*	*
PET num_of_rr_interval	0x000910dd	US	1	*	*	*
PET num_of_time_slots	0x000910de	US	1	*	*	*
PET num_of_slices	0x000910df	US	1	*	*	*
PET num_of_time_slices	0x000910e0	US	1	*	*	*
PET rest_stress	0x000910e2	SL	1	*	*	*
PET frame_id	0x0009105c	UI	1	*	*	*
PET scan_id	0x0009105d	UI	1	*	*	*
PET exam_id	0x0009105e	UI	1	*	*	*
PET patient_id	0x0009105f	LO	1	*	*	*
PET compatible_version	0x00091060	SH	1	*	*	*
PET software_version	0x00091061	SH	1	*	*	*
PET where_is_frame	0x00091062	ST	1	*	*	*
PET frame_size	0x00091063	SL	1	*	*	*
PET file_exists	0x00091064	SL	1	*	*	*
PET patient_entry	0x00091065	SL	1	*	*	*
PET table_height	0x00091066	FL	1	*	*	*
PET table_z_position	0x00091067	FL	1	*	*	*
PET landmark_datetime	0x00091068	DT	1	*	*	*
PET slice_count	0x00091069	SL	1	*	*	*
PET start_location	0x0009106a	FL	1	*	*	*
PET acq_delay	0x0009106b	SL	1	*	*	*
PET acq_start	0x0009106c	DT	1	*	*	*
PET acq_duration	0x0009106d	SL	1	*	*	*
PET acq_bin_dur	0x0009106e	SL	1	*	*	*
PET acq_bin_start	0x0009106f	SL	1	*	*	*
PET actual_stop_cond	0x00091070	SL	1	*	*	*
PET total_prompts	0x00091071	FD	1	*	*	*
PET total_delays	0x00091072	FD	1	*	*	*
PET frame_valid	0x00091073	SL	1	*	*	*
PET validity_info	0x00091074	SL	1	*	*	*
PET archived	0x00091075	SL	1	*	*	*
PET compression	0x00091076	SL	1	*	*	*
PET uncompressed_size	0x00091077	SL	1	*	*	*
PET accum_bin_dur	0x00091078	SL	1	*	*	*
PET frame_number	0x000910d8	SL	1	*	*	*
PET list_file_exists	0x000910d9	SL	1	*	*	*
PET where_is_list_frame	0x000910da	ST	1	*	*	*
PET unlisted_scan	0x000910e1	SL	1	*	*	*

PET phase percentage	0x000910e3	FL	1	*	*	*
PET acq_bin_num	0x000910e8	SL	1	*	*	*
PET acq_bin_dur_percent	0x000910e9	FL	1	*	*	*
PET compatible_version	0x00091079	SH	1	*	*	*
PET software_version	0x0009107a	SH	1	*	*	*
PET is_datetime	0x0009107b	DT	1	*	*	*
PET is_source	0x0009107c	SL	1	*	*	*
PET is_contents	0x0009107d	SL	1	*	*	*
PET is_type	0x0009107e	SL	1	*	*	*
PET is_reference	0x0009107f	DS	1	*	*	*
PET multi_patient	0x00091080	SL	1	*	*	*
PET number_of_normals	0x00091081	SL	1	*	*	*
PET color_map_id	0x00091082	UI	1	*	*	*
PET window_level_type	0x00091083	SL	1	*	*	*
PET rotate	0x00091084	FL	1	*	*	*
PET flip	0x00091085	SL	1	*	*	*
PET zoom	0x00091086	FL	1	*	*	*
PET pan_x	0x00091087	SL	1	*	*	*
PET pan_y	0x00091088	SL	1	*	*	*
PET window_level_min	0x00091089	FL	1	*	*	*
PET window_level_max	0x0009108a	FL	1	*	*	*
PET recon_method	0x0009108b	SL	1	*	*	*
PET attenuation	0x0009108c	SL	1	*	*	*
PET atten_coefficient	0x0009108d	FL	1	*	*	*
PET bp_filter	0x0009108e	SL	1	*	*	*
PET bp_filter_cutoff	0x0009108f	FL	1	*	*	*
PET bp_filter_order	0x00091090	SL	1	*	*	*
PET bp_center_l	0x00091091	FL	1	*	*	*
PET bp_center_p	0x00091092	FL	1	*	*	*
PET atten_smooth	0x00091093	SL	1	*	*	*
PET atten_smooth_param	0x00091094	SL	1	*	*	*
PET angle_smooth_param	0x00091095	SL	1	*	*	*
PET wellcountercal_id	0x00091096	UI	1	*	*	*
PET trans_scan_id	0x00091097	UI	1	*	*	*
PET norm_cal_id	0x00091098	UI	1	*	*	*
PET blk_cal_id	0x00091099	UI	1	*	*	*
PET cac_edge_threshold	0x0009109a	FL	1	*	*	*
PET cac_skull_offset	0x0009109b	FL	1	*	*	*
PET emiss_sub_id	0x0009109c	UI	1	*	*	*
PET radial_filter_3d	0x0009109d	SL	1	*	*	*
PET radial_cutoff_3d	0x0009109e	FL	1	*	*	*

PET axial_filter_3d	0x0009109f	SL	1	*	*	*
PET axial_cutoff_3d	0x000910a0	FL	1	*	*	*
PET axial_start	0x000910a1	FL	1	*	*	*
PET axial_spacing	0x000910a2	FL	1	*	*	*
PET axial_angles_used	0x000910a3	SL	1	*	*	*
PET ir_num_iterations	0x000910b2	SL	1	*	*	*
PET ir_num_subsets	0x000910b3	SL	1	*	*	*
PET ir_recon_fov	0x000910b4	FL	1	*	*	*
PET ir_corr_model	0x000910b5	SL	1	*	*	*
PET ir_loop_filter	0x000910b6	SL	1	*	*	*
PET ir_pre_filt_parm	0x000910b7	FL	1	*	*	*
PET ir_loop_filt_parm	0x000910b8	SL	1	*	*	*
PET response_filt_parm	0x000910b9	FL	1	*	*	*
PET post_filter	0x000910ba	SL	1	*	*	*
PET post_filt_parm	0x000910bb	FL	1	*	*	*
PET ir_regularize	0x000910bc	SL	1	*	*	*
PET regularize_parm	0x000910bd	FL	1	*	*	*
PET ac_bp_filter	0x000910be	SL	1	*	*	*
PET ac_bp_filt_cut_off	0x000910bf	FL	1	*	*	*
PET ac_bp_filt_order	0x000910c0	SL	1	*	*	*
PET ac_img_smooth	0x000910c1	SL	1	*	*	*
PET ac_img_smooth_parm	0x000910c2	FL	1	*	*	*
PET scatter_method	0x000910c3	SL	1	*	*	*
PET scatter_num_iter	0x000910c4	SL	1	*	*	*
PET scatter_parm	0x000910c5	FL	1	*	*	*
PET ctac_conv_scale	0x000910d4	LO	1	*	*	*
PET loop_filter_parm	0x000910d5	FL	1	*	*	*
Recon Protocol	0x000910e4	ST	1	*		*
PET compatible_version	0x000910a4	SH	1	*	*	*
PET software_version	0x000910a5	SH	1	*	*	*
PET slice_number	0x000910a6	SL	1	*	*	*
PET total_counts	0x000910a7	FL	1	*	*	*
PET other_atts	0x000910a8	OB	1	*	*	*
PET other_atts_size	0x000910a9	SL	1	*	*	*
PET archived	0x000910aa	SL	1	*	*	*
PET bp_center_x	0x000910ab	FL	1	*	*	*
PET bp_center_y	0x000910ac	FL	1	*	*	*
PET trans_frame_id	0x000910ad	UI	1	*	*	*
PET tpluse_frame_id	0x000910ae	UI	1	*	*	*
PET profile_spacing	0x000910b1	FL	1	*	*	*
PET seg_qc_parm	0x000910c6	FL	1	*	*	*

PET overlap	0x000910c7	SL	1	*	*	*
PET ovlp_frm_id	0x000910c8	UI	1	*	*	*
PET ovlp_trans_frm_id	0x000910c9	UI	1	*	*	*
PET ovlp_tpulse_frm_id	0x000910ca	UI	1	*	*	*
PET ir_z_filter_flag	0x000910db	SL	1	*	*	*
PET ir_z_filter_ratio	0x000910dc	FL	1	*	*	*
PET left shift	0x000910e5	FL	1	*	*	*
PET posterior shift	0x000910e6	FL	1	*	*	*
PET superior shift	0x000910e7	FL	1	*	*	*
3D Filter flag	0x000910ea	SL	1	*		*
3D Filter cutoff	0x000910eb	FL	1	*		*
3D Filter order	0x000910ec	SL	1	*		*
Reformat group	0x000910f0	UI	1	*		*